

Author Search

⇒ FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 11:58:33 ON 30 SEP 2008

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FILE COVERS 1907 - 30 Sep 2008 VOL 149 ISS 14

FILE LAST UPDATED: 29 Sep 2008 (20080929/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

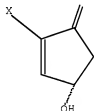
New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

⇒ D STAT QUE L39

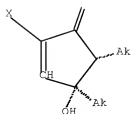
L18 STR



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L21 242 SEA FILE=REGISTRY SSS FUL L18

L33 STR



Structure attributes must be viewed using STN Express query preparation.

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 L36 62 SEA FILE=HCAPLUS ABB=ON PLU=ON L35
 L37 52 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND (PRY<=2002 OR
 AY<=2002 OR PY<=2002)
 L38 20 SEA FILE=HCAPLUS ABB=ON PLU=ON MULLALLY J7/AU
 L39 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L37

⇒ D IBIB ED ABS HITSTR L39 1

L39 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:80455 HCAPLUS Full-text

DOCUMENT NUMBER: 140:139470

TITLE: α,β -unsaturated ketone as inhibitors of
 ubiquitin isopeptidases that induce p53-independent
 cell death and their therapeutic uses

INVENTOR(S): Mullally, James E.; Moos, Philip;
 Fitzpatrick, Frank A.

PATENT ASSIGNEE(S): University of Utah Research Foundation, USA

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|------------|
| WO 2004009023 | A2 | 20040129 | WO 2003-US22576 | 20030718 ← |
| WO 2004009023 | A3 | 20040617 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2492523 | A1 | 20040129 | CA 2003-2492523 | 20030718 ← |
| AU 2003249320 | A1 | 20040209 | AU 2003-249320 | 20030718 ← |
| EP 1542682 | A2 | 20050622 | EP 2003-765765 | 20030718 ← |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |

US 20060106099 A1 20060518 US 2005-521570 20051107 ←
 PRIORITY APPLN. INFO.: US 2002-396584P P 20020718 ←
 WO 2003-US22576 W 20030718

ED Entered STN: 01 Feb 2004

AB A novel class of inhibitors of ubiquitin isopeptidases is disclosed that cause tumor cell death via mol. Mechanisms independent of p53. Specifically, compds. Containing an α,β -unsatd. Ketone with a sterically accessible electrophilic β -carbon and related compds. Are identified herein. The α -carbon of at least one α,β -unsatd. Ketone moiety bears an electron withdrawing substituent which is selected from the group consisting of fluorine, chlorine, bromine, iodine, nitro, nitrilo and carboxy. The said carboxy group is an acid, ester of amide group. The said α,β -unsatd. Ketone comprises a conjugated cyclopentene moiety. Pharmaceutical compns. Comprising the inhibitor compds. And methods of using the compds. For treating a variety of disease, such as tumor, inflammation, autoimmune disease, restenosis and dry eye, are disclosed.

IT 96055-64-0 96055-65-1 96055-66-2

96055-68-4 160791-07-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

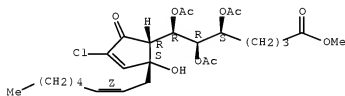
(α,β -unsatd. Ketone as inhibitors of ubiquitin isopeptidases that induce p53-independent cell death and their therapeutic uses)

RN 96055-64-0 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

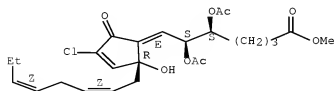


RN 96055-65-1 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxyl-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

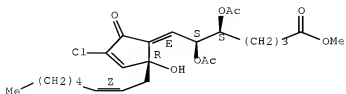
Double bond geometry as shown.



RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

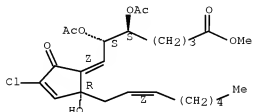
Absolute stereochemistry.
Double bond geometry as shown.



RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

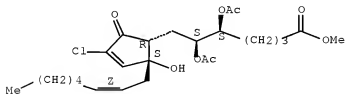
Absolute stereochemistry.
Double bond geometry as shown.



RN 160791-07-1 HCAPLUS

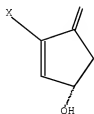
CN Prosta-10,14-dien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



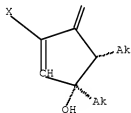
Serial No.:10/521,570
Structure Search

=> D STAT QUE L37
L18 STR



Structure attributes must be viewed using STN Express query preparation.

L21 242 SEA FILE=REGISTRY SSS FUL L18
L33 STR



Structure attributes must be viewed using STN Express query preparation.

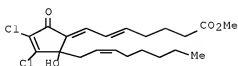
L35 141 SEA FILE=REGISTRY SUB=L21 SSS FUL L33
L36 62 SEA FILE=HCAPLUS ABB=ON PLU=ON L35
L37 52 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND (PRY<=2002 OR
AY<=2002 OR PY<=2002)

=> S L37 NOT L39
L43 51 L37 NOT L39

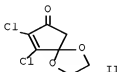
=> D IBIB ED ABS HITSTR L43 1-51

L43 ANSWER 1 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:916991 HCAPLUS Full-text
DOCUMENT NUMBER: 136:232135
TITLE: Prostanoids: LXXX. Analogs of "marine" prostanoids.
(±)-11-chlorochlorovulone II
AUTHOR(S): Akhmetvaleev, R. R.; Baibulatova, G. M.; Nuriev, I. F.; Shitikova, O. V.; Miftakhov, M. S.
CORPORATE SOURCE: Institute of Organic Chemistry, Ufa Scientific Center, Russian Academy of Sciences, Ufa, 450054, Russia
SOURCE: Russian Journal of Organic Chemistry (Translation of Zhurnal Organicheskoi Khimii) (2001), 37(8), 1083-1087

PUBLISHER: CODEN: RJOCEQ; ISSN: 1070-4280
 DOCUMENT TYPE: MAIK Nauka/Interperiodica Publishing
 LANGUAGE: Journal
 OTHER SOURCE(S): English
 CASREACT 136:232135
 ED Entered SIN: 20 Dec 2001
 GI



I



II

AB Analog of chlorovulone II (I) containing an extra chlorine atom at C11 was synthesized starting with 1,4-dioxo-6,7-dichlorospiro[4,4]non-6-ene (II).

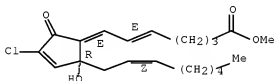
IT 100295-80-5P, Chlorovulone II

RL: SPN (Synthetic preparation); PREP (Preparation)
 (analog; preparation of chlorovulone II analog from 1,4-dioxo-6,7-dichlorospiro[4,4]non-6-ene)

RN 100295-80-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 2 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:785496 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 136:67131

TITLE: New halogenated marine prostanoids with cytotoxic activity from the Okinawan soft coral *Clavularia viridis*

AUTHOR(S): Watanabe, Kinzo; Sekine, Miyuki; Takahashi, Haruko; Iguchi, Kazuo

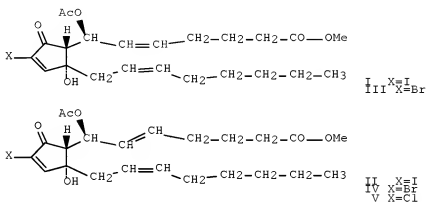
CORPORATE SOURCE: School of Life Science, Tokyo University of Pharmacy and Life Science, Hachioji, Tokyo, 192-0392, Japan

SOURCE: Journal of Natural Products (2001), 64(11), 1421-1425

CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 30 Oct 2001
 GI



AB Five new halogenated prostanooids (I-V) were isolated from the Okinawan soft coral *Clavularia viridis*. The gross structure of I was elucidated mainly on the basis of NMR spectral data. The relative and absolute configurations were determined by anal. of NOESY and CD data, chemical conversion, and the modified Mosher's method. The structures of II-IV and V were deduced by comparison of their spectral data with those of I. Compound I demonstrated cytotoxic activity.

IT 160791-09-3, Punaglandin 8

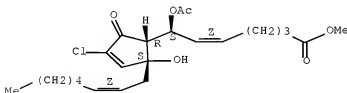
RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (halogenated marine prostanooids with cytotoxic activity from Okinawan soft coral *Clavularia viridis*)

RN 160791-09-3 HCAPLUS

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 383414-92-4P

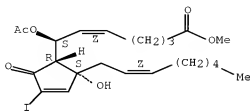
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
 (halogenated marine prostanooids with cytotoxic activity from Okinawan soft coral *Clavularia viridis*)

RN 383414-92-4 HCAPLUS

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.



IT 383414-93-5P 383414-94-6P 383414-95-7F

383414-96-8P

RL: NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

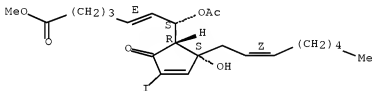
(halogenated marine prostanooids with cytotoxic activity from Okinawan soft coral *Clavularia viridis*)

RN 383414-93-5 HCAPLUS

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.

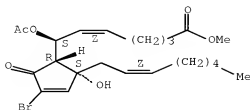


RN 383414-94-6 HCAPLUS

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-10-bromo-12-hydroxy-9-oxo-, methyl ester, (5Z,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.

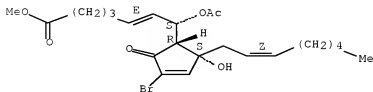


RN 383414-95-7 HCAPLUS

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-10-bromo-12-hydroxy-9-oxo-, methyl ester, (5E,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.

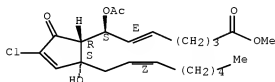


RN 383414-96-8 HCAPLUS

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.



IT 105343-03-1P, Iodovulone I 383414-97-9P

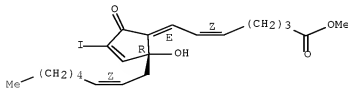
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation from 7-acetoxy-7,8-dihydroiodovulone I)

RN 105343-03-1 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

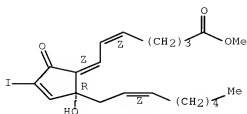


RN 383414-97-9 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 3 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:537512 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 129:316062

ORIGINAL REFERENCE NO.: 129:64499a,64502a

TITLE: Application of a novel carbonyl ene reaction: total syntheses of phyllanthocin and chlorovulone II

AUTHOR(S): Zhu, Shuren

CORPORATE SOURCE: Rice Univ., Houston, TX, USA

SOURCE: (1998) 163 pp. Avail.: UMI, Order No.

DA9827467

From: Diss. Abstr. Int., B 1998, 59(3), 1121

Dissertation

DOCUMENT TYPE:

LANGUAGE: English

ED Entered STN: 25 Aug 1998

AB Unavailable

IT 100295-80-5P, Chlorovulone II

RL: SPN (Synthetic preparation); PREP (Preparation)

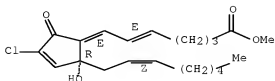
(total syntheses of phyllanthocin and chlorovulone II via carbonyl ene reaction)

RN 100295-80-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 4 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:355711 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 129:122470

ORIGINAL REFERENCE NO.: 129:25097a,25100a

TITLE: A carbohydrate approach to 4-hydroxy-2-cyclopentenone

CORPORATE SOURCE:

SOURCE:

Tetrahedron Letters (1998), 39(24),
4247-4250

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER:

DOCUMENT TYPE:

Elsevier Science Ltd.

LANGUAGE:

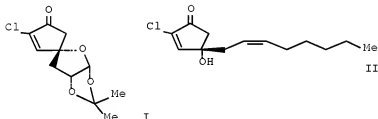
English

OTHER SOURCE(S) :

CASREACT 129:122470

ED Entered STN: 12 Jun 1998

GI



AB An efficient and stereoselective synthesis of chiral precursor I of 2-chloro-4-hydroxy-4-alkyl-2-cyclopentenone, e.g. II, has been realized by alkylation of a sugar Me uronate derived from 1,2-O-isopropylidene- α -D-glucose with an acetonyl equivalent, and subsequent intramol. Wittig reaction.

IT 96055-66-2P, Punaglandin IV

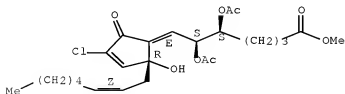
RL: PNU (Preparation, unclassified); PREP (Preparation)
(carbohydrate approach to the hydroxycyclopentenone moiety of
punaglandin IV via alkylation of an ester uronate)

RN 96055-66-2 HCAPLUS

Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

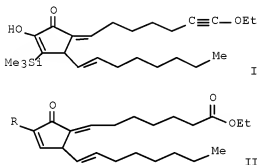


REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 5 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

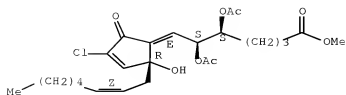
ACCESSION NUMBER: 1998:355693 HCAPLUS Full-text

DOCUMENT NUMBER: 129:122469
 ORIGINAL REFERENCE NO.: 129:25097a,25100a
 TITLE: Cross-conjugated cyclopentenone prostaglandins
 synthesis of Δ^7 -10-chloro-15-deoxy PGA1 ethyl
 ester
 AUTHOR(S): Tius, Marcus A.; Busch-Petersen, Jakob; Yamashita,
 Mason
 CORPORATE SOURCE: Dep. Chem., Univ. Hawaii, Honolulu, HI, 96822, USA
 SOURCE: Tetrahedron Letters (1998), 39(24),
 4219-4222
 CODEN: TELEAY; ISSN: 0040-4039
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 129:122469
 ED Entered STN: 12 Jun 1998
 GI



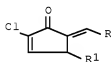
- AB The cationic cyclopentannulation reaction, e.g. cyclization of $\text{MeOCH}_2\text{OCH}=\text{C}:\text{CH}(\text{CH}_2)_4\text{C}(\text{t})\text{bond.COEt}$ to cyclopentenone I, provides an unconventional but highly efficient strategy for the synthesis of unsatd. prostanooids and their analogs, e.g. II [R = OH, OAc, OC(:S)NMe₂, Cl]. II were evaluated against KB and LoVo cell lines [IC₅₀ = 80 μM (KB), 101 μM (LoVo) {I; R = OH}; IC₅₀ = 53 μM (KB), 49 μM (LoVo) {I; R = OAc}; IC₅₀ = 0.13 μM (KB), 1.3 μM (LoVo) {I; R = OC(:S)NMe₂}; IC₅₀ = 7 μM (KB), 57 μM (LoVo) {I; R = Cl}].
- IT 96055-66-2DP, Punaglandin 4, analog
 RL: PNU (Preparation, unclassified); PREP (Preparation)
 (synthesis of cross-conjugated cyclopentenone prostaglandins via a cationic cyclopentannulation reaction)
- RN 96055-66-2 HCAPLUS
- CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

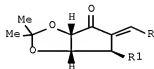


REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 6 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1998:218250 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 128:270449
 ORIGINAL REFERENCE NO.: 128:53537a,53540a
 TITLE: A novel chloroenone synthesis with dichloromethylenedimethylammonium chloride: synthesis of 12-deoxychlorovulone analogs
 AUTHOR(S): Chen, Yung-Fa
 CORPORATE SOURCE: Product Development Dep., Refining and Manufacturing Res. Cent., Chinese Petroleum Corp., Chiayi, Taiwan
 SOURCE: Taiwan Kexue (1997), 50(1), 92-120
 CODEN: TKHSAU; ISSN: 0015-7791
 PUBLISHER: Formosan Association for Advancement of Science
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 128:270449
 ED Entered STN: 18 Apr 1998
 GI



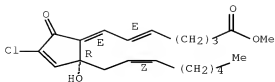
I



II

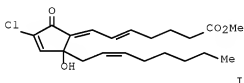
AB A variety of 12-deoxychlorovulone II analogs such as I [R = (CH₂)₅CO₂Me, R₁ = H, Me, CHMe₂, (CH₂)₃Me, (CH₂)₇Me; R = (E)-CH:CH(CH₂)₃CO₂Me, C.tplbond.C(CH₂)₃CO₂Me, R₁ = (CH₂)₇Me] were prepared by acid catalyzed deprotection of the corresponding acetonides II followed by nucleophilic chloride substitution catalyzed by Viehe's salt, Cl₂C:N+Me₂Cl⁻, in the presence of Et₃N.
 IT 100295-80-50P, Chlorovulone II, 12-deoxy analogs
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of 12-deoxychlorovulone II analogs via chloride nucleophilic substitution reaction catalyzed by Viehe's salt)
 RN 100295-80-5 HCAPLUS
 CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 7 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1998:143663 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 128:127831
 ORIGINAL REFERENCE NO.: 128:25107a,25110a
 TITLE: Practical Synthesis of (±)-Chlorovulone II
 AUTHOR(S): Ciufolini, Marco A.; Zhu, Shuren
 CORPORATE SOURCE: Department of Chemistry, Rice University, Houston, TX, 77005-1892, USA
 SOURCE: Journal of Organic Chemistry (1998), 63(5), 1668-1675
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 128:127831
 ED Entered STN: 10 Mar 1998
 GI



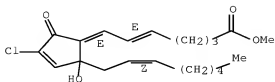
AB A total synthesis of (±)-chlorovulone II (I) that is 10 steps shorter than the best alternative currently available (nine vs 19 steps) is described. The key event of the synthesis is an aldol addition of the enolate of Et acetate into 4-cyclopentene-1,3-dione, a substance that has received little attention as an educt for prostanoid synthesis and for which little is known about carbonyl 1,2-addition with enolates. In addition, the chemical and stereochem. details of a route to a key intermediate toward the title compound that involves a carbonyl-ene reaction and a radical addition to an aldehyde carbonyl is provided.

IT 201302-89-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (practical synthesis of chlorovulone II via an aldol addition to cyclopentenone)

RN 201802-89-3 HCAPLUS
 CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl

ester, (5E,7E,12E,14Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 8 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:760118 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 128:88377

ORIGINAL REFERENCE NO.: 128:17265a,17268a

TITLE: A remarkable ene-like reaction: development and synthetic applications

AUTHOR(S): Ciufolini, Marco A.; Deaton, Melissa V.; Zhu, Shuren; Chen, Mingying

CORPORATE SOURCE: Department of Chemistry, Rice University, Houston, TX, 77005-1892, USA

SOURCE: Tetrahedron (1997), 53(48), 16299-16312

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 128:88377

ED Entered STN: 06 Dec 1997

AB A catalytic ene-like reaction of aldehydes with those vinyl ethers that display the oxygen functionality at the central carbon of an allylic system, e.g., 2-methoxypropene, was discussed in detail. The reaction was promoted by 0.05 equivalent of the 1:1 complex of Yb(fod)₃ and acetic acid, and it formed the centerpiece of the synthesis of chlorovulone II, mitomycinoids and phyllanthocin.

IT 100295-80-5P, Chlorovulone II

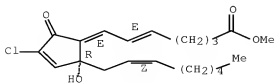
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 100295-80-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

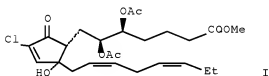
Absolute stereochemistry.

Double bond geometry as shown.



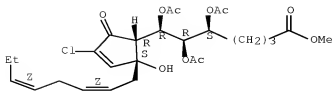
REFERENCE COUNT: 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 9 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1995:228132 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 122:102045
 ORIGINAL REFERENCE NO.: 122:19127a,19130a
 TITLE: The punaglandins: 10-chloroprostanoids from the octocoral *Telesto riisei*
 AUTHOR(S): Baker, Bill J.; Scheuer, Paul J.
 CORPORATE SOURCE: Dep. Chem., Univ. Hawaii at Manoa, Honolulu, HI, 96822, USA
 SOURCE: Journal of Natural Products (1994), 57(10), 1346-53
 CODEN: JNPRDF; ISSN: 0163-3864
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 06 Dec 1994
 GI



- AB *Telesto riisei*, an octocoral from Hawaii, produces nineteen highly functionalized prostanoids, the punaglandins, which are characterized by various oxygenation at C-5, -6, -7, and -12, and a 10-chloro-9-cyclopentenone moiety. The absolute stereochem. of the 10-chloroprostanoids, including Punaglandin 5 (I), is epimeric to that of the Pacific marine prostanoids without halogen. The punaglandins have shown anti-inflammatory and antitumor activity. A synthetic 10-thiomethyl derivative enhances in vivo mineralization in human osteoblasts.
- IT 96055-63-9, Punaglandin 1 96055-64-0, Punaglandin 2
 96055-65-1, Punaglandin 3 96055-66-2, Punaglandin 4
 96055-67-3 96055-68-4 160791-06-0, Punaglandin
 5 160791-07-1, Punaglandin 6 160791-08-2, Punaglandin
 7 160791-09-3, Punaglandin 8
 RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
 (punaglandin isolation and structural characterization and antineoplastic activity from Hawaiian octocoral)
- RN 96055-63-9 HCAPLUS
- CN Prosta-10,14,17-trien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

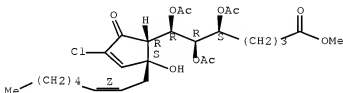


RN 96055-64-0 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

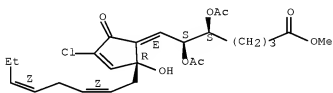


RN 96055-65-1 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

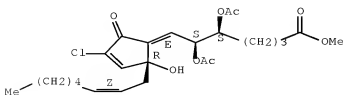


RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

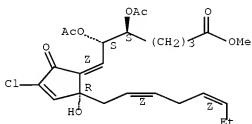


RN 96055-67-3 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

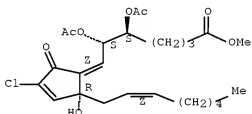


RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

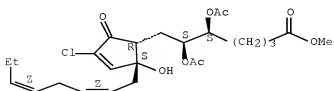


RN 160791-06-0 HCAPLUS

CN Prosta-10,14,17-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

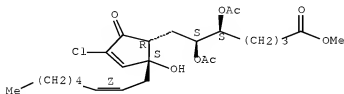


RN 160791-07-1 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

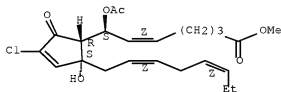


RN 160791-08-2 HCAPLUS

CN Prosta-5,10,14,17-tetraen-1-oic acid, 7-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7S,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

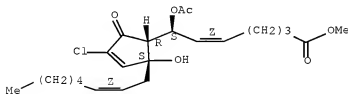


RN 160791-09-3 HCAPLUS

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 10 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

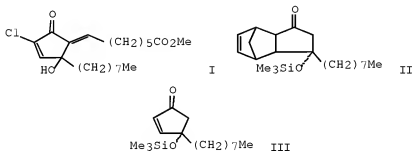
ACCESSION NUMBER: 1994:533752 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 121:133752

ORIGINAL REFERENCE NO.: 121:24173a,24176a

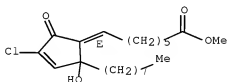
TITLE: Natural products synthesis by retro-Diels-Alder reaction. VIII. A concise stereospecific formal synthesis of tetrahydrochlorovulone

AUTHOR(S): Liu, Zhiyu; Yang, Jiying; Zhang, Jianjun; Tao, Xueliang
 CORPORATE SOURCE: Shanghai Inst. Org. Chem., Chin. Acad. Sci., Shanghai, 200032, Peop. Rep. China
 SOURCE: Chinese Chemical Letters (1993), 4(11), 947-8
 CODEN: CCLEE7; ISSN: 1001-8417
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 121:133752
 ED Entered STN: 17 Sep 1994
 GI



AB A potent antineoplastic tetrahydrochlorovulone I was synthesized by retro-Diels Alder reaction of tricyclic ketone II to give cyclopentenone III as a key step.
 IT 102355-12-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (stereospecific preparation of, via retro Diels-Alder)
 RN 102355-12-4 HCAPLUS
 CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (7E,12E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



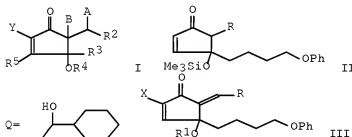
L43 ANSWER 11 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1994:533585 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 121:133585
 ORIGINAL REFERENCE NO.: 121:24141a, 24144a
 TITLE: Preparation of 4-hydroxy-2-cyclopentenone derivative and carcinostatic and osteogenesis promoter containing the same

Serial No.:10/521,570

INVENTOR(S): Furuya, Minoru; Sugiura, Satoshi; Hazato, Atsuo
 PATENT ASSIGNEE(S): Teijin Ltd., Japan
 SOURCE: PCT Int. Appl., 84 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------------|
| WO 9405619 | A1 | 19940317 | WO 1993-JP1266 | 19930907 <-- |
| W: AU, CA, JP, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| AU 9349829 | A | 19940329 | AU 1993-49829 | 19930907 <-- |
| AU 678389 | B2 | 19970529 | | |
| EP 659728 | A1 | 19950628 | EP 1993-919623 | 19930907 <-- |
| R: CH, DE, FR, GB, IT, LI, NL, SE | | | | |
| CA 2144313 | C | 19990330 | CA 1993-2144313 | 19930907 <-- |
| US 5675031 | A | 19971007 | US 1995-397176 | 19950308 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1992-241998 | A 19920910 <-- |
| | | | WO 1993-JP1266 | W 19930907 <-- |

OTHER SOURCE(S): MARPAT 121:133585
 ED Entered STN: 17 Sep 1994
 GI



AB An optically active compound represented by general formula [I; Y = H, halo; A = OH, C2-7 acyloxy, C2-5 alkoxy carbonyloxy, or C1-7 sulfonyloxy and B = H, or alternatively A and B are combined together to represent a bond; R2 = C4-10 alicyclic hydrocarbon, C6-10 aromatic hydrocarbon or C1-9 heterocyclic hydrocarbon group each of which may be substituted; R3 = H or C1-10 aliphatic hydrocarbon, C4-10 alicyclic hydrocarbon or C6-10 aromatic hydrocarbon group each of which may be substituted; R4 = H, C1-4 alkyl, C2-7 acyl, C2-5 alkoxy carbonyl, tri(C1-7 hydrocarbyl)silyl or a group which forms an acetal bond together with the oxygen atom to which R4 is bonded; R5 = H or C1-10 aliphatic hydrocarbon or C4-10 alicyclic hydrocarbon group each of which may be substituted] or a mixture thereof, useful as anticancer agents and for the treatment of osteoporosis and osteomalacia, are prepared A carcinostatic and osteogenesis promoter each containing the hydroxycyclopentenone derivative I as the active ingredient is claimed. Thus, (dL)-4-hydroxy-2-cyclopentenone derivative (II; R = H) was treated with LiN(CHMe2)2 in THF at -78° and condensed with cyclohexanecarbaldehyde to give 67% II (R = Q) which was

mesylated by MeSO₂Cl in pyridine followed by elimination reaction using DBU in CH₂Cl₂ to give (cyclohexylmethylene)cyclopentenone derivative (III; R = cyclohexyl, R₁ = Me₃Si, X = Cl) and its isomer. Benzyldenecyclopentenone III (R = 4-methoxycarbonylphenyl, R₁ = H, X = Cl) showed IC₅₀ of 0.004 µg/mL for inhibiting L1210 leukemia cells.

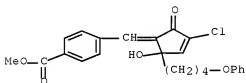
IT 157121-52-3P 157121-53-4P 157121-54-5P
157121-55-6P 157121-56-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as anticancer agent and osteogenesis promoter)

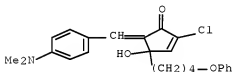
RN 157121-52-3 HCAPLUS

CN Benzoic acid, 4-[[4-chloro-2-hydroxy-5-oxo-2-(4-phenoxybutyl)-3-cyclopenten-1-ylidene]methyl]-, methyl ester (CA INDEX NAME)



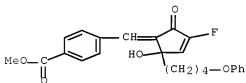
RN 157121-53-4 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-5-[[4-(dimethylamino)phenyl]methylene]-4-hydroxy-4-(4-phenoxybutyl)- (CA INDEX NAME)



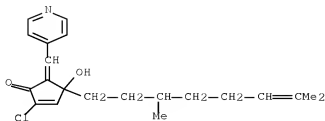
RN 157121-54-5 HCAPLUS

CN Benzoic acid, 4-[[4-fluoro-2-hydroxy-5-oxo-2-(4-phenoxybutyl)-3-cyclopenten-1-ylidene]methyl]-, methyl ester (CA INDEX NAME)



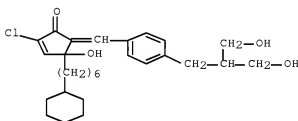
RN 157121-55-6 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-4-(3,7-dimethyl-6-octen-1-yl)-4-hydroxy-5-(4-pyridinylmethylene)- (CA INDEX NAME)



RN 157121-56-7 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-4-(6-cyclohexylhexyl)-4-hydroxy-5-[[4-[3-hydroxy-2-(hydroxymethyl)propyl]phenyl]methylene]- (CA INDEX NAME)



L43 ANSWER 12 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:76680 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 112:76680

ORIGINAL REFERENCE NO.: 112:13095a,13098a

TITLE: Synthesis of 10-halogenated clavulone derivatives

AUTHOR(S): Iguchi, Kazuo; Kaneta, Soichiro; Tsune, Chieko;

Yamada, Yasuji

CORPORATE SOURCE: Tokyo Coll. Pharm., Tokyo, 192-03, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1989),
37(5), 1173-5

CODEN: CPBTAL; ISSN: 0009-2363

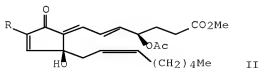
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 112:76680

ED Entered STN: 03 Mar 1990

GI



II

Serial No.:10/521,570

AB Epoxidn. of clavulone II with Me₃COOH gave the (10R,11S)-epoxide (I) stereoselectively. Haloclavulones II (R = Cl, Br, iodo) were obtained from I and LiR and II (R = F) with KF-HF.

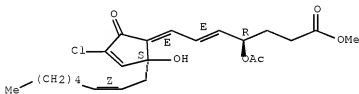
IT 111695-42-2P 111695-43-3P 125159-68-4P
125159-69-5P 125159-70-9P 125159-71-9P
125159-72-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 111695-42-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (4R,5E,7E,12 α ,14Z)- (9CI) (CA INDEX NAME)

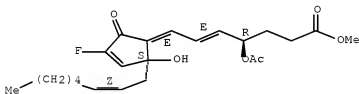
Absolute stereochemistry.
Double bond geometry as shown.



RN 111695-43-3 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-fluoro-12-hydroxy-9-oxo-, methyl ester, (4R,5E,7E,12 α ,14Z)- (9CI) (CA INDEX NAME)

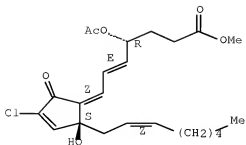
Absolute stereochemistry.
Double bond geometry as shown.



RN 125159-68-4 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (4R,5E,7Z,12 α ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

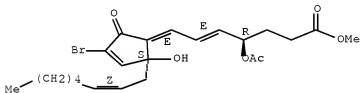


RN 125159-69-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-bromo-12-hydroxy-9-oxo-, methyl ester, (4R,5E,7E,12α,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

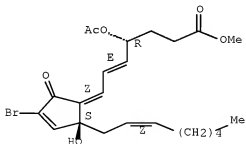


RN 125159-70-8 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-bromo-12-hydroxy-9-oxo-, methyl ester, (4R,5E,7Z,12α,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

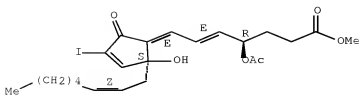


RN 125159-71-9 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-12-hydroxy-10-iodo-9-oxo-, methyl ester, (4R,5E,7E,12α,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

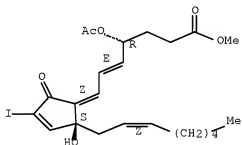


RN 125159-72-0 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-12-hydroxy-10-iodo-9-oxo-, methyl ester, (4R,5E,7Z,12a,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 13 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:632451 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 111:232451

ORIGINAL REFERENCE NO.: 111:38605a,38608a

TITLE: Preparation of punaglandin derivatives

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

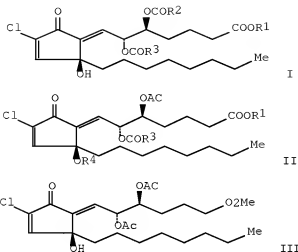
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|---------------------|-----------------|----------------|
| JP 62234060 | A | 19871014 | JP 1986-76213 | 19860401 <-- |
| PRIORITY APPLN. INFO.: | | | GB 1985-8422 | A 19850401 <-- |
| OTHER SOURCE(S): | | CASREACT 111:232451 | | |
| ED Entered STN: | | 23 Dec 1989 | | |
| GI | | | | |



AB The title compds. I (R1-R3 = lower alkyl), useful as potential anticancer agents, are prepared from II (R4 = hydroxy-protecting group). Dehydration of Me 5,6-(isopropylidenedioxy)-7-hydroxy-7-[(2R)-2-methoxymethoxy-2-octyl-4-chloro-5-oxo-3-cyclopenten-1-yl]heptanoate (preparation given), followed by dealkylation, acetylation, and deprotection, gave III.

IT 102354-92-7P

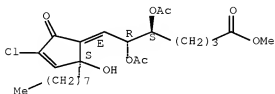
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as potential anticancer agent)

RN 102354-92-7 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,12α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 14 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:553507 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 111:153507

ORIGINAL REFERENCE NO.: 111:25581a,25584a

TITLE: Alkynylcyclopentenol derivatives as punaglandin intermediates and their preparation
INVENTOR(S): Mori, Kenji; Takeuchi, Tei; Yuya, Masakazu; Takeda, Shigeo

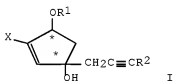
PATENT ASSIGNEE(S): Fuji Chemicals Industrial Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|--------------|
| JP 01026529 | A | 19890127 | JP 1987-183042 | 19870722 <-- |
| PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 111:153507 | | | JP 1987-183042 | 19870722 <-- |
| ED Entered STN: 28 Oct 1989 | | | | |
| GI | | | | |



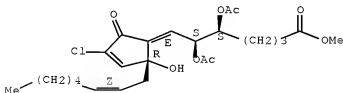
AB The title compds. I (R1 = OH-protecting group; X = halo; R2 = H; the asterisk indicates asym. C), useful as intermediates for antitumor and antiviral punaglandin, were prepared Treatment of HC.tplbond.CMe with BuLi, followed by reaction with (4R)-4-tert-butylidimethylsilyloxy-3-chloro-2- cyclopentenone, gave 84.5% (1R,4S)-1-(tert-butylidimethyl)silyloxy-2-chloro- 4-(2-propynyl)cyclopent-2-en-4-ol.

IT 96055-66-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (intermediates for, preparation of alkynylcyclopentenol derivs. as)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



L43 ANSWER 15 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1989:514961 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 111:114961
 ORIGINAL REFERENCE NO.: 111:19271a, 19274a
 TITLE: Preparation of 1-halo-2,3,4-trioxybutanes as
 intermediates for anticancer punaglandin
 INVENTOR(S): Mori, Kenji; Takeuchi, Tei; Yuya, Masakazu; Takeda, Shigeo

Serial No.:10/521,570

PATENT ASSIGNEE(S): Fuji Chemicals Industrial Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|---------------|
| JP 01026575 | A | 19890127 | JP 1987-183043 | 1987/0722 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1987-183043 | 1987/0722 <-- |

OTHER SOURCE(S): MARPAT 111:114961

ED Entered STN: 01 Oct 1989

AB R1OCH2CHOR2CHOR3CH2X (I) (R1-R3 = OH-protecting group; OR2R3O = acetal; X = halo), useful as intermediates for anticancer punaglandin, were prepared
 Reaction of (4S,5S)-4-benzyloxymethyl-5-hydroxymethyl-2,2-dimethyl-1,3-dioxolane with MeSO2Cl, followed by treatment with NaI and addition reaction of the resulting product with CH2:CHCO2Me in the presence of Bu3SnCl and NaBH4 under a Hg lamp, gave (5S,6S)-5,6-isopropylidenedioxy-7- benzyloxyheptanoic acid Me ester.

IT 96055-66-2

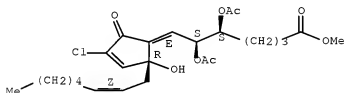
RL: RCT (Reactant); RACT (Reactant or reagent)
 (intermediates for, halotrioxabutanes as)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 16 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:434116 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 111:34116

ORIGINAL REFERENCE NO.: 111:5737a,5740a

TITLE: Cytotoxic action of prostaglandins on human
 retinoblastoma cell line, Y-79

AUTHOR(S): Nakamura, Masao; Koshihara, Yasuko; Mochizuki, Manabu;
 Masuda, Kanjiro

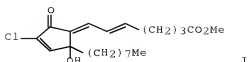
CORPORATE SOURCE: Dep. Ophthalmol., Asahi-Chuou Hosp., Chiba, 289-25,
 Japan

SOURCE: Atarashii Ganka (1989), 6(4), 569-75
 CODEN: ATGAEX; ISSN: 0910-1810

DOCUMENT TYPE: Journal
 LANGUAGE: Japanese

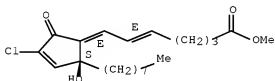
ED Entered STN: 05 Aug 1989

GI



- AB Cultured Y-79 cells produced no detectable PGD2, PGE2, PGF2 α , thromboxane B2, or 6-oxo-PGF1 α , suggesting the absence of an endogenous self-regulatory system of prostaglandins in Y-79 cell growth in vitro. Exogenously added PGE1, PGE2, and PGF2 α had no effects on Y-79 cell growth in vitro at concns. of 1-20 μ g/mL. However, PGA1, PGA2, PGD2, PGJ2, and especially 64E (I), inhibited cell growth. S.c. injection of 2-4 mg PGD2/kg/day suppressed and 4 mg I/kg/day strongly suppressed the in vivo growth of retinoblastoma in the nude mouse.
- IT 114247-16-4
RL: PROC (Process)
(cytotoxic action of, on human retinoblastoma)
- RN 114247-16-4 HCAPLUS
- CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,12 α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



- L43 ANSWER 17 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
- ACCESSION NUMBER: 1989:107604 HCAPLUS [Full-text](#)
- DOCUMENT NUMBER: 110:107604
- ORIGINAL REFERENCE NO.: 110:17587a,17590a
- TITLE: Structure requirements for antiproliferative and cytotoxic activities of marine coral prostanoids from the Japanese stolonifer *Clavularia viridis* against human myeloid leukemia cells in culture
- AUTHOR(S): Honda, Atsushi; Mori, Yo; Iguchi, Kazuo; Yamada, Yasuji
- CORPORATE SOURCE: Dep. Biochem., Tokyo Coll. Pharm., Hachioji, 192-03, Japan
- SOURCE: Prostaglandins (1989), 36(5), 621-30
CODEN: PRGLBA; ISSN: 0090-6980
- DOCUMENT TYPE: Journal
- LANGUAGE: English
- ED Entered STN: 03 Apr 1989
- AB The structure-antiproliferative and cytotoxic activity relationships of marine coral prostanoids from Japanese stolonifer *C. viridis* and related compds. were

examined in HL-60 cells in culture. The alkylidenecyclopentenone structure in these prostanoids was required for the antiproliferative and cytotoxic activities against HL-60 cells, but the epoxy prostanoids without cross-conjugated cyclopentenone system also had the activities. The presence of the OH group at the C-12 position in the prostanoids enhanced the activities, but the stereospecificity of the 12-OH group was not required for the activities. Introduction of halogen atom at the C-10 position of the prostanoids potentiated the activities (Cl > Br = I > H). Introduction of groups for blocking β -oxidation to the α -side chain of the prostanoids did not increase the activities. The presence of dienone (C5-6 and C7-8) in the structure potentiated the activities. The results provide the basis for designing a new class of antitumor agent from marine coral prostanoids.

IT 100295-81-6, Chlorovulone I 105343-03-1, Iodovulone I

105343-04-2, Bromovulone I 111695-42-2

RL: PRP (Properties)

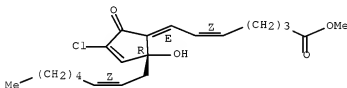
(cytotoxicity of, to human myeloid leukemia cells, structure in relation to)

RN 100295-81-6 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

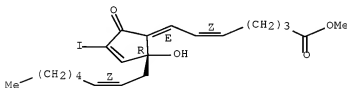


RN 105343-03-1 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



RN 105343-04-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-bromo-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

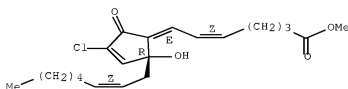
Absolute stereochemistry.

Double bond geometry as shown.

ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

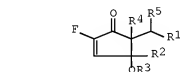
Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 19 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1988:549198 HCAPLUS Full-text
 DOCUMENT NUMBER: 109:149198
 ORIGINAL REFERENCE NO.: 109:24803a,24806a
 TITLE: Preparation of fluorocyclopentenone derivatives as anticancer agents
 INVENTOR(S): Hasato, Atsuo; Kurozumi, Seiji; Suzuki, Masaaki; Noyori, Ryoji
 PATENT ASSIGNEE(S): Teijin Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

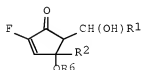
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|--------------|
| JP 63072672 | A | 19880402 | JP 1986-217255 | 19860917 <-- |
| PRIORITY APPLN. INFO.: JP 1986-217255 19860917 <-- | | | | |
| OTHER SOURCE(S): MARPAT 109:149198 | | | | |
| ED Entered STN: 28 Oct 1988 | | | | |
| GI | | | | |



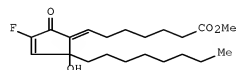
I



II



III



IV

AB The title compds. I [R1 = (substituted) C1-10 alkyl; R2 = (substituted) alkyl, alkenyl; R3 = H, tri(C1-7)hydrocarbylsilyl, group forming acetal bond with O of OH group; R4 = H; R5 = OH; R4R5 = bond], useful as anticancer agents (no

data), were prepared from cyclopentenone II [R6 = tri(Cl-7)hydrocarbylsilyl, group forming acetal bond with O of OH group] and cyclopentenone III. Aldol condensation of II (R2 = octyl, R6 = Me3Si) with Me 7-oxoheptanoate, followed by dehydration and deprotection, gave title compds. (E)- and (Z)-IV.

IT 116752-44-4P 116752-45-5P

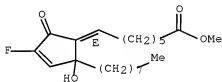
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of, as anticancer agent)

RN 116752-44-4 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-fluoro-12-hydroxy-9-oxo-, methyl ester, (7E,12E)- (9CI) (CA INDEX NAME)

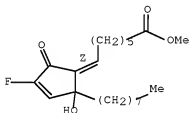
Double bond geometry as shown.



RN 116752-45-5 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-fluoro-12-hydroxy-9-oxo-, methyl ester, (7Z,12E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L43 ANSWER 20 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:528635 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 109:128635

ORIGINAL REFERENCE NO.: 109:21417a,21420a

TITLE: Preparative bioorganic chemistry. 9. Synthesis of punaglandin 4 by means of enzymatic resolution of the key chlorocyclopentene derivative

Mori, Kenji; Takeuchi, Tadashi

CORPORATE SOURCE: Dep. Agric. Chem., Univ. Tokyo, Tokyo, 113, Japan

SOURCE: Tetrahedron (1988), 44(2), 333-42

CODEN: TETRAB; ISSN: 0040-4020

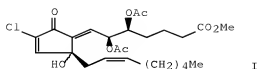
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 109:128635

ED Entered STN: 14 Oct 1988

GI



AB Punaglandin (I) a chlorinated marine prostanoid, was synthesized from (+)-tartaric acid and (1S,4R)-(-)-4-tert-butyldimethylsilyloxy-3-chloro-2-cyclopenten-1-ol, which was prepared by asym. hydrolysis of the (±)-acetate with pig pancreatic lipase.

IT 96055-68-4P

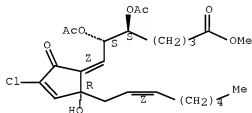
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 96055-66-2P

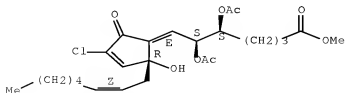
RL: SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

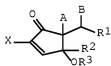
Double bond geometry as shown.



L43 ANSWER 21 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1988:454569 HCAPLUS Full-text
 DOCUMENT NUMBER: 109:54569
 ORIGINAL REFERENCE NO.: 109:9191a,9194a
 TITLE: Preparation of prostaglandins as antitumor agents
 PATENT ASSIGNEE(S): Teijin Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 43 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------------|
| JP 62096438 | A | 19870502 | JP 1986-108664 | 19860514 <-- |
| JP 06043360 | B | 19940608 | | |
| US 4711895 | A | 19871208 | US 1985-791156 | 19851022 <-- |
| PRIORITY APPLN. INFO.: | | | US 1985-791156 | A 19851022 <-- |
| | | | JP 1984-220475 | A 19841022 <-- |
| | | | JP 1984-220476 | A 19841022 <-- |
| | | | JP 1985-28429 | A 19850218 <-- |
| | | | JP 1985-130845 | A 19850618 <-- |

OTHER SOURCE(S): CASREACT 109:54569
 ED Entered STN: 19 Aug 1988
 GI



I



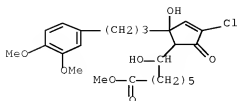
II

AB The title compds. I [X = H, halo; A = H and B = OH, or AB = bond; R1 = (substituted) C1-10 alkyl, alkenyl, alkynyl; R2 = (substituted) C1-10 alkyl, alkenyl, alkynyl, but R2 ≠ 2-octenyl, 8-acetoxy-2-octenyl, 2,5-octadienyl; R3 = H, protecting group], useful as antitumor agents, are prepared from II (R5R6 = bond). Treatment of II (X = Cl; R2 = 3,7-dimethyloctyl; R3 = Me3Si; R5R6 = bond) (preparation given) with LDA/THF at -45°, followed by addition of MeO2C(CH2)5CHO in THF at -45° gave 50% I (X = Cl; A = H; B = OH; R1 = MeO2C(CH2)2; R2 = 3,7-dimethyloctyl; R3 = Me3Si), which in pyridine was treated with MsCl, followed by addition of DBU to afford 30% (Z)-I (AB = bond) (III) and 52% (E)-III. (E)-III showed IC50 of 0.025 µg/mL against leukemia L1210 cells.

IT 104248-48-8P 104248-51-3P 104248-75-1F
 114531-39-7P 114531-75-8P 114531-78-1F
 114531-79-2P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation of, as antitumor agent)

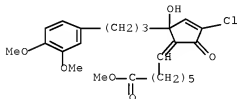
RN 104248-48-8 HCAPLUS
 CN 3-Cyclopentene-1-heptanoic acid, 3-chloro-5-[3-(3,4-

dimethoxyphenyl)propyl]-ζ, 5-dihydroxy-2-oxo-, methyl ester (CA INDEX NAME)



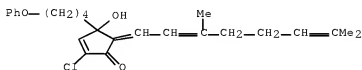
RN 104248-51-3 HCAPLUS

CN Heptanoic acid, 7-[4-chloro-2-[3-(3,4-dimethoxyphenyl)propyl]-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene]-, methyl ester (CA INDEX NAME)



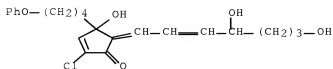
RN 104248-75-1 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-5-(3,7-dimethyl-2,6-octadien-1-ylidene)-4-hydroxy-4-(4-phenoxybutyl)- (CA INDEX NAME)



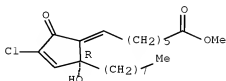
RN 114499-39-7 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-5-(4,7-dihydroxy-2-hepten-1-ylidene)-4-hydroxy-4-(4-phenoxybutyl)- (CA INDEX NAME)



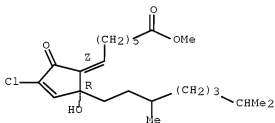
RN 114531-75-8 HCAPLUS
 CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



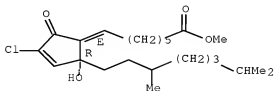
RN 114531-78-1 HCAPLUS
 CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-15,19-dimethyl-9-oxo-,
 methyl ester, (7Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 114531-79-2 HCAPLUS
 CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-15,19-dimethyl-9-oxo-,
 methyl ester, (7E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

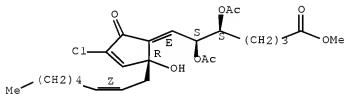


L43 ANSWER 22 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1988:454513 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 109:54513
 ORIGINAL REFERENCE NO.: 109:9183a,9186a

Serial No.:10/521,570

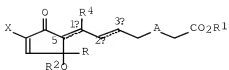
TITLE: Total syntheses of clavulones and punaglandins
 AUTHOR(S): Sasai, Hiroaki; Ogawa, Yuji; Iwasaki, Genji; Sano, Mami; Sodeoka, Mikiko; Shibasaki, Masakatsu
 CORPORATE SOURCE: Fac. Pharm. Sci., Hokkaido Univ., Japan
 SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1987), 29, 409-16
 CODEN: TYKYDS
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 ED Entered STN: 19 Aug 1988
 AB A report from a symposium describing the total syntheses of marine eicosanoids (+)-clavulone II and (+)-punaglandin 4.
 IT 36055-66-2P, (+)-Punaglandin 4
 RL: SPN (Synthetic preparation); PREP (Preparation) (total synthesis of)
 RN 96055-66-2 HCAPLUS
 CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



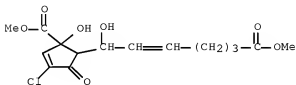
L43 ANSWER 23 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1988:437539 HCAPLUS Full-text
 DOCUMENT NUMBER: 109:37539
 ORIGINAL REFERENCE NO.: 109:6346h,6347a
 TITLE: Preparation of 5-(carboxyalkenyl)-2-halo-4-hydroxy-2-cyclopentenones as antitumor agents
 INVENTOR(S): Nakamoto, Yasumasa; Ishizuka, Yoriyasu; Miyamura, Yoshio; Togashi, Masahiro; Nagai, Zene; Tsuji, Shunichi; Morikawa, Susumu
 PATENT ASSIGNEE(S): Nihon Iyakuhin Kogyo Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|-------------|-----------|-----------------|--------------|
| JP 62129245 | A | 19870611 | JP 1985-268397 | 19851130 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1985-268397 | 19851130 <-- |
| OTHER SOURCE(S): | CASREACT | 109:37539 | | |
| ED Entered STN: | 05 Aug 1988 | | | |
| GI | | | | |

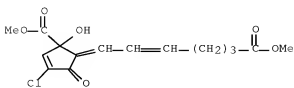


I

- AB The title compds. [I; X = halo; R = H, CO2R3; R3 = (unbranched) alkyl, cycloalkyl, (unsubstituted) Ph; R1 = H, lower alkyl; R2 = H, protecting group; R4 = OH or H where C-5 and C-1' are linked with a double or single bond resp.; A = CH2, O, S], useful as antitumor agents, were prepared. A solution of 2-chloro-4-hydroxy-4-methoxycarbonyl-2-cyclopentenone in THF was added dropwise at -60° to a mixture of Me3SiNHSiMe3 and BuLi in THF and after 20 min, Bu3SnCl was added, followed by warming to -20°. A solution of OHC(CH2)5CO2Me in THF was added at -60° and the mixture was stirred for 30 min to give 76% I (X = Cl, R = CO2Me, R1 = Me, R2 = H, R4 = OH; C-2' and C-3' being linked with a double bond; A = CH2) which was treated with MeSO2Cl in CH2Cl2 containing Et3N to give 25.6% I (R4 = H, other variables as defined above) (II). II inhibited the growth of L1210 mouse leukemia cells with an IC50 of 0.05 µg/mL.
- IT 107836-95-3P 107836-96-4P 114011-01-7P
114011-02-8P 114011-03-9P 114011-04-0P
114011-05-1P 114011-06-2P 114011-14-2P
- RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as antitumor agent)
- RN 107836-95-3 HCAPLUS
- CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, methyl ester (CA INDEX NAME)

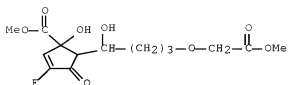


- RN 107836-96-4 HCAPLUS
- CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, methyl ester (CA INDEX NAME)



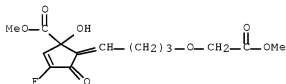
RN 114011-01-7 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-fluoro-1-hydroxy-5-[1-hydroxy-4-(2-methoxy-2-oxoethoxy)butyl]-4-oxo-, methyl ester (CA INDEX NAME)



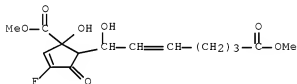
RN 114011-02-8 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-fluoro-1-hydroxy-5-[4-(2-methoxy-2-oxoethoxy)butylidene]-4-oxo-, methyl ester (CA INDEX NAME)



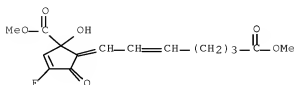
RN 114011-03-9 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-fluoro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, methyl ester (CA INDEX NAME)



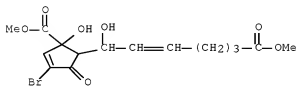
RN 114011-04-0 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-fluoro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, methyl ester (CA INDEX NAME)



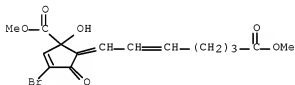
RN 114011-05-1 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-bromo-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, methyl ester (CA INDEX NAME)



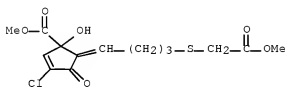
RN 114011-06-2 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-bromo-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, methyl ester (CA INDEX NAME)



RN 114011-14-2 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[4-[(2-methoxy-2-oxoethyl)thio]butylidene]-4-oxo-, methyl ester (CA INDEX NAME)



L43 ANSWER 24 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:422686 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 109:22686

ORIGINAL REFERENCE NO.: 109:3865a,3868a

TITLE: Synthetic studies on marine prostanoids

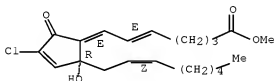
AUTHOR(S): Kosugi, Hirafumi; Watanabe, Yasuyuki; Konta, Hiroshi; Uda, Hisashi

CORPORATE SOURCE: Chem. Res. Inst. Non-Aqueous Solutions, Tohoku Univ., Japan

SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1987), 29, 417-24

DOCUMENT TYPE: CODEN: TYKYDS
 LANGUAGE: Journal
 Japanese
 ED Entered STN: 22 Jul 1988
 AB A report from a symposium describing the total synthesis of marine prostanoids
 clavulone II, clavulone III, and chlorovulone II.
 IT 100295-80-5P, Chlorovulone II
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (total synthesis of)
 RN 100295-80-5 HCAPLUS
 CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl
 ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



L43 ANSWER 25 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1988:406130 HCAPLUS Full-text
 DOCUMENT NUMBER: 109:6130
 ORIGINAL REFERENCE NO.: 109:1153a,1156a
 TITLE: A process for the preparation of 3-fluoro-4-hydroxy-2-
 cyclopentenone derivatives as intermediates for
 fluoropunaglandins
 INVENTOR(S): Hasato, Atsuo; Kurozumi, Seiji; Suzuki, Masaaki;
 Noyori, Ryoji
 PATENT ASSIGNEE(S): Teijin Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------|------|----------|-----------------|--------------|
| JP 62242640 | A | 19871023 | JP 1986-84961 | 19860415 <-- |
| JP 06004555 | B | 19940119 | | |
| PRIORITY APPLN. INFO.: | | | JP 1986-84961 | 19860415 <-- |
| ED Entered STN: 09 Jul 1988 | | | | |
| GI | | | | |



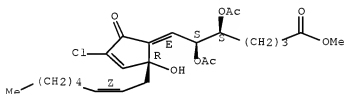
AB The title compds. [I; X = F; R = H, tri(C1-7 alkyl)silyl, or forming an acetal], 4R-, 4S-I or their mixts., useful as intermediates for fluorinated punaglandins and other 5-membered ring compds., were prepared. A solution of KF and 18-crown-6 ether was stirred 30 min, I (X = Cl, R = tetrahydropyranyl) was added, and the mixture was stirred 12 h at room temperature to give 25% I (X = F, R = tetrahydropyranyl).

IT 96055-66-2D, fluorinated
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (intermediate for, fluorohydroxycyclopentenone derivative as)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



L43 ANSWER 26 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1988:221488 HCAPLUS Full-text
 DOCUMENT NUMBER: 108:221488
 ORIGINAL REFERENCE NO.: 108:36350h,36351a
 TITLE: Preparation of punaglandin derivatives
 INVENTOR(S): Noyori, Ryoji; Suzuki, Masaaki; Morita, Yasushi;
 Yanagisawa, Akira
 PATENT ASSIGNEE(S): Teijin Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------|------|----------|-----------------|--------------|
| JP 62207254 | A | 19870911 | JP 1986-48516 | 19860307 <-- |
| JP 06055716 | B | 19940727 | | |
| PRIORITY APPLN. INFO.: | | | JP 1986-48516 | 19860307 <-- |
| ED Entered STN: 24 Jun 1988 | | | | |
| GI | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I (R1 = C1-10 alkyl; R2 = H, OH-protecting group; A is H, B is OH, or AB = bond; * indicates asym. C), II, and III, useful as potential anticancer and antiviral agents, were prepared from IV and V. Condensation of enone VI (preparation given) and aldehyde VII (preparation given), followed by dehydration of the product, gave 37% dienone VIII.

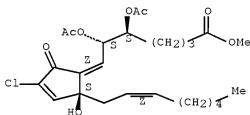
IT 105927-55-7P 105927-56-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as potential anticancer and antiviral agent)

RN 105927-55-7 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,12α,14Z)- (9CI) (CA INDEX NAME)

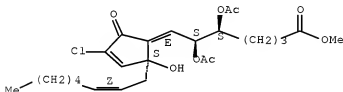
Absolute stereochemistry.
Double bond geometry as shown.



RN 105927-56-8 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,12α,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L43 ANSWER 27 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:186211 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 108:186211

ORIGINAL REFERENCE NO.: 108:30575a,30578a

TITLE: Preparation of 2-halo-2-cyclopenten-1-one derivatives as antitumor agents

INVENTOR(S): Nakamoto, Yasumasa; Ishizuka, Yoriyasu; Miyamura, Yoshio; Togashi, Masahiro; Nagai, Zene; Tsuji, Shunichi; Morikawa, Susumu

PATENT ASSIGNEE(S): Nihon Iyakuin Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF

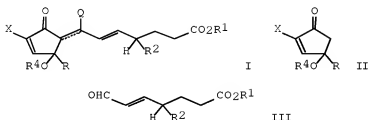
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

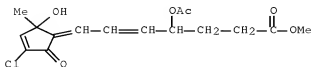
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------|------|----------|-----------------|--------------|
| JP 62114933 | A | 19870526 | JP 1985-252825 | 19851113 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1985-252825 | 19851113 <-- |
| ED Entered STN: 28 May 1988 | | | | |
| GI | | | | |

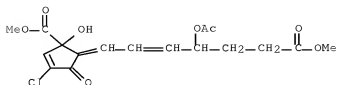


- AB The title compds. (I; X = halo; R1 = H, alkyl; R2 = acyloxy; R4 = H, OH-protecting group; R = alkyl, CO2R3; R3 = alkyl, cycloalkyl, PhCH2; Q = H on unsatd., OH on saturated bond) and their pharmaceutically acceptable salts, useful as antitumor agents, are prepared To a mixture of 0.41 mL (Me3Si)2NH in THF and 10% LiBu in hexane at -50°, were successively added at -60° with stirring 0.408 g cyclopentenone II [X = Cl, R = Me, R4 = tetrahydropyranyl (THP)] in THF, 0.504 mL Bu3SnCl in THF, and then 0.380 g formylhexenoate (4R)-III (R1 = Me, R2 = AcO) in THF at -65° to -20° and the resulting mixture was treated with 30 mL saturated aqueous NH4Cl at 0° to give 0.230 g I (X = Cl, R = R1 = Me, R2 = AcO, R4 = THP, Q = H), which (0.220 g) in DME was deprotected with a drop of 6N HCl at 25° to give 0.064 g I (X = Cl, R = R1 = Me, R2 = AcO, R4 = H, Q = H) which showed IC50 of 0.04 µg/mL against L-1210 mouse leukemia cells.
- IT 113922-70-6P 113922-71-7P 113922-72-8P
113922-73-9P 113922-74-6P 113947-25-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as neoplasm inhibitor)
- RN 113922-70-6 HCAPLUS
- CN 5-Heptenoic acid, 4-(acyloxy)-7-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)-, methyl ester (CA INDEX NAME)



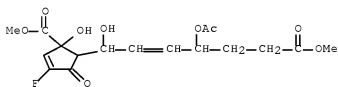
- RN 113922-71-7 HCAPLUS
- CN 2-Cyclopentene-1-carboxylic acid, 5-[4-(acyloxy)-7-methoxy-7-oxo-2-

hepten-1-ylidene]-3-chloro-1-hydroxy-4-oxo-, methyl ester (CA INDEX NAME)



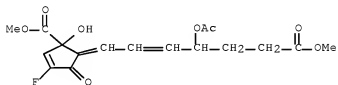
RN 113922-72-8 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 5-[4-(acetyloxy)-1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl]-3-fluoro-1-hydroxy-4-oxo-, methyl ester (CA INDEX NAME)



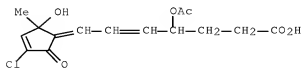
RN 113922-73-9 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 5-[4-(acetyloxy)-7-methoxy-7-oxo-2-hepten-1-ylidene]-3-fluoro-1-hydroxy-4-oxo-, methyl ester (CA INDEX NAME)



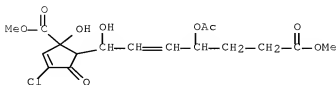
RN 113922-74-0 HCAPLUS

CN 5-Heptenoic acid, 4-(acetyloxy)-7-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)- (CA INDEX NAME)



RN 113947-25-4 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 5-[4-(acetyloxy)-1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl]-3-chloro-1-hydroxy-4-oxo-, methyl ester (CA INDEX NAME)



L43 ANSWER 28 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:180821 HCAPLUS Full-text

DOCUMENT NUMBER: 108:180821

ORIGINAL REFERENCE NO.: 108:29560h,29561a

TITLE: In vivo effects of prostaglandins on human

retinoblastoma cells in nude mice

AUTHOR(S): Nakamura, Masao; Fujino, Yujiro; Mochizuki, Manabu;

Minoda, Kensei; Masuda, Kenjiro

CORPORATE SOURCE: Sch. Med., Univ. Tokyo, Tokyo, 113, Japan

SOURCE: Japanese Journal of Ophthalmology (1987),

31(4), 608-20

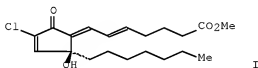
CODEN: JJOPA7; ISSN: 0021-5155

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered SIN: 28 May 1988

GI



I

AB PGD2 and 64 E (I), a prostaglandin derivative, were tested for their capacity to suppress the growth of retinoblastoma in the nude mouse. Ten million cells of an established cell line of human retinoblastoma, Y-79 cells, were transferred s.c. into the nude mouse, and after the transferred cells became a tumor with a diameter >7.5 mm, either PGD2 (1, 2, or 4 mg/kg/day) or I (4 mg/kg/day) dissolved in Hanks' solution was daily injected s.c. near the tumor for 14 days. The estimated tumor weight as defined by the formula of (length) + (width)²/2 was evaluated at various time intervals after the treatment. Although a low dose of PGD2, 1 mg/kg/day, had no effect, higher doses of PGD2 had a clear effect in suppressing the growth of retinoblastoma in the nude mouse. Tumors in I-treated animals were also markedly suppressed in their growth. Histol. examination revealed that tumors treated with these drugs had a much larger area of necrosis with fewer tumor cells than the tumors in control animals.

IT 114247-16-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

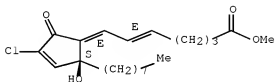
(antitumor activity of, in retinoblastoma of human)

RN 114247-16-4 HCAPLUS

CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,12α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 29 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:180820 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 108:180820

ORIGINAL REFERENCE NO.: 108:29557a,29560a

TITLE: In vitro effects of prostaglandins on human retinoblastoma cell line Y-79 cells

AUTHOR(S): Nakamura, Masao; Koshihara, Yasuko; Fujino, Yujiro; Mochizuki, Manabu; Minoda, Kensei; Masuda, Kanjiro

CORPORATE SOURCE: Sch. Med., Univ. Tokyo, Tokyo, 113, Japan

SOURCE: Japanese Journal of Ophthalmology (1987),

31(4), 598-607

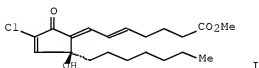
CODEN: JJOPA7; ISSN: 0021-5155

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 28 May 1988

GI



AB An established retinoblastoma cell line, Y-79, was investigated for its capacity to synthesize prostaglandins (PGs) and its susceptibility to PGs and their derivs., 64 E (I), exogenously given. The capacity of Y-79 cells to produce PGs was estimated by TLC using [1-14C] arachidonic acid as a substrate, and it was found that no detectable amts. of PGD2, PGE2, PGF2α, thromboxane B2, or 6-keto PGF1α were produced by Y-79 cells. Furthermore, the effect of exogenously given PGs (PGA1, A2, D2 E1, E2, F2α, and J2) and I on the cell proliferation of Y-79 cells in culture were examined PGE1, E2, and

F2a showed no effects on the cell growth of Y-79 cells at all tested doses (1-20 µg/mL). On the other hand, PGA1, A2, D2, and J2, and I remarkably inhibited the growth of Y-79 cells. A dose-response study indicated that I was the most effective among these drugs, followed by PGJ2. PGD2, A1, and A2 were less effective than PGJ2. Thus, Y-79 cells do not produce endogenous PGs, and these cells are highly susceptible to exogenous PGs (PGJ2, D2, A1, and A2) as well as I.

IT 114247-16-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

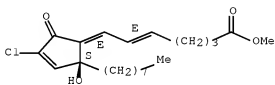
(antitumor activity of, in retinoblastoma of human)

RN 114247-16-4 HCAPLUS

CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,12a)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 30 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:112018 HCAPLUS Full-text

DOCUMENT NUMBER: 108:112018

ORIGINAL REFERENCE NO.: 108:18329a,18332a

TITLE: Total synthesis of punaglandin 4

AUTHOR(S): Sasai, Hiroaki; Shibasaki, Masakatsu

CORPORATE SOURCE: Sagami Chem. Res. Cent., Sagami-hara, Japan

SOURCE: Tetrahedron Letters (1987), 28(3), 333-6

CODEN: TELEAY; ISSN: 0040-4039

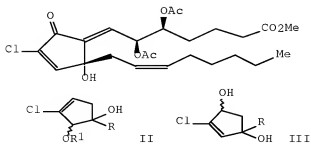
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 108:112018

ED Entered STN: 01 Apr 1988

GI



I

II

III

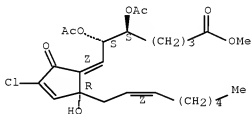
AB The marine prostanoid, punaglandin 4 (I) was prepared from 1,2-bis(trimethylsiloxy)cyclopentene. In a key sequence, diol II [R = cis-CH₂CH:CH(CH₂)₄Me, R1 = H] was selectively mesylated to give II (R1 = MeSO₂). Upon solvolysis in aqueous DMSO, II (R1 = MeSO₂) underwent rearrangement to give the isomeric diol III (same R) as a 1:1 mixture of epimers.

IT 96055-68-4P 105927-55-7P 105927-56-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

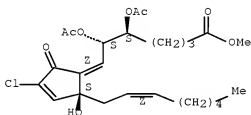
Absolute stereochemistry.
 Double bond geometry as shown.



RN 105927-55-7 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,12α,14Z)- (9CI) (CA INDEX NAME)

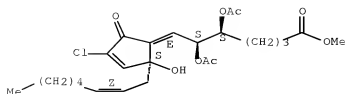
Absolute stereochemistry.
 Double bond geometry as shown.



RN 105927-56-8 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,12α,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



IT 96055-66-2F

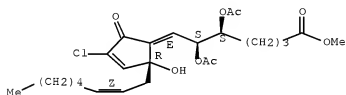
RL: SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 31 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:55688 HCAPLUS Full-text

DOCUMENT NUMBER: 108:55688

ORIGINAL REFERENCE NO.: 108:9289a,9292a

TITLE: Prostaglandin synthesis 15. Synthesis and structural revision of (7E)- and (7Z)-punaglandin 4

AUTHOR(S): Suzuki, Masaaki; Morita, Yasushi; Yanagisawa, Akira; Baker, Bill J.; Scheuer, Paul J.; Noyori, Ryoji

CORPORATE SOURCE: Dep. Chem., Nagoya Univ., Nagoya, 464, Japan

SOURCE: Journal of Organic Chemistry (1988), 53(2), 286-95

CODEN: JOCEAH; ISSN: 0022-3263

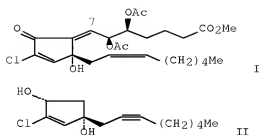
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 108:55688

ED Entered STN: 20 Feb 1988

GI



AB A convergent synthesis of antineoplastic (7E)- and (7Z)-punaglandin 4, dictates revision of the originally postulated structures, to the stereoisomers, (7E)- and (7Z)-I, resp. Condensation of (R)-3-chloro-4-(tert-butyldimethylsiloxy)-2-cyclopentenone and the Li derivative of $\text{CH}_2:\text{C}:\text{C}(\text{SnMe}_3)(\text{CH}_2)_4\text{Me}$ gave after desilylation the crystalline acetylenic diol II. Partial hydrogenation of the triple bond using Lindlar catalyst, followed by oxidation of the secondary alc. with pyridinium dichromate gave the hydroxy enone. The punaglandin skeleton was constructed by aldol condensation of the silyl-protected hydroxycyclopentenone and (2R,3S)-2,3-diacetoxy-6-carbomethoxyhexanal. Dehydration of the aldol product followed by desilylation gave (7E)- and (7Z)-I identical with the naturally occurring sample in all respects. The enantiomers and some other stereoisomers were prepared and exhibit similar inhibitory effects on L1210 leukemia cell proliferation.

IT 103384-65-2P 103384-66-3P 103384-67-4P
103384-68-5P 103531-36-8P 105927-55-7P
105927-56-8P 111901-59-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

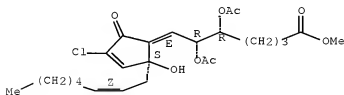
(preparation and antitumor activity of)

RN 103384-65-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5R,6R,7E,12 α ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

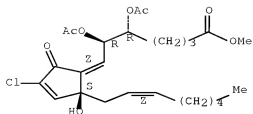


RN 103384-66-3 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5R,6R,7Z,12 α ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

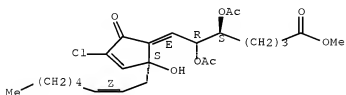


RN 103384-67-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,12a,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

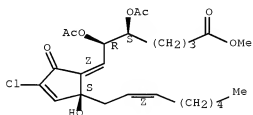


RN 103384-68-5 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7Z,12a,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

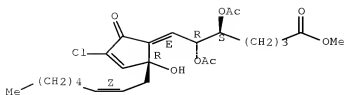


RN 103531-36-8 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

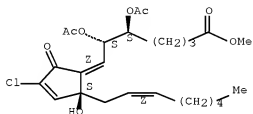


RN 105927-55-7 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,12a,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

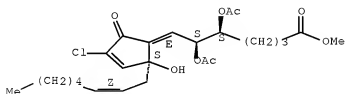


RN 105927-56-8 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,12a,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

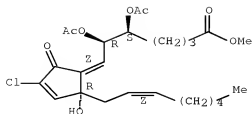


RN 111901-59-8 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 96055-66-2P 96055-68-4F

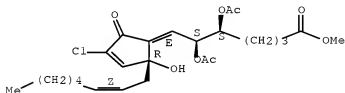
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (preparation, photochem. isomerization, and antitumor activity of)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

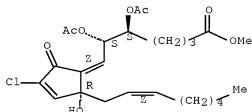


RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 32 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:35031 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 108:35031

ORIGINAL REFERENCE NO.: 108:5809a,5812a

TITLE: A new marine epoxy prostanoid with an antiproliferative activity from the stolonifer *Clavularia viridis* Quoy and Gaimard

AUTHOR(S): Iguchi, Kazuo; Kaneta, Soichiro; Mori, Kenichiro; Yamada, Yasuji

CORPORATE SOURCE: Tokyo Coll. Pharm., Hachioji, 192-03, Japan

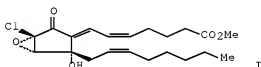
SOURCE: Chemical & Pharmaceutical Bulletin (1987), 35(10), 4375-6
CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 06 Feb 1988

GI



AB A new marine epoxy prostanoid (I) with an antiproliferative activity was isolated from the Japanese stolonifer *C. viridis*. The structure of I was established on the basis of spectroscopy and chemical transformation.

IT 100295-81-6

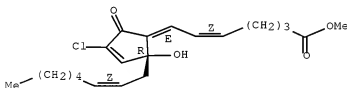
RL: RCT (Reactant); RACT (Reactant or reagent)
(epoxidn. of)

RN 100295-81-6 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 33 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:214 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 108:214

ORIGINAL REFERENCE NO.: 108:31a,34a

TITLE: Antiproliferative and cytotoxic effects of newly discovered halogenated coral prostanoids from the Japanese stolonifer *Clavularia viridis* on human myeloid leukemia cells in culture

AUTHOR(S): Honda, Atsushi; Mori, Yo; Iguchi, Kazuo; Yamada, Yasuji

CORPORATE SOURCE: Dep. Biochem., Tokyo Coll. Pharm., Hachioji, 192-03, Japan

SOURCE: Molecular Pharmacology (1987), 32(4), 530-5
CODEN: MOPMA3; ISSN: 0026-895X

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 09 Jan 1988

AB The antiproliferative and cytotoxic activities of newly discovered halogenated coral prostanoids (chlorovulone, bromovulone, and iodovulone) from the Japanese stolonifer *C. viridis* and their related compds. were determined in HL-60 cells in culture. The order of antiproliferative and cytotoxic activities of naturally occurring marine prostanoids against HL-60 cells was chlorovulone I > bromovulone I = iodovulone I > clavulone I or II > PGA2. The IC50 (concentration required to inhibit cell growth by 50%) value (0.03 μ M (0.01 μ g/mL)) and cytotoxic effects (>0.3 μ M (0.1 μ g/mL)) of chlorovulone I were about 200 and 100 times stronger than those of PGA2, resp., on the molar basis. From the data on the structure-activity relationship of the halogenated coral prostanoids and the related compds., it was determined that the alkylidencyclopentenone structure in these prostanoids was essential for the antiproliferative and cytotoxic activities against HL-60 cells and the introduction of halogen function at C-10 position in the structure enhanced the activities (Cl = F > Br = I > H), that the stereospecificity of the 12-hydroxyl group in the chlorovulone mol. was not required for the activities, and that the presence of dienone (C5-6 and C7-8) in the structure potentiated the activities. Bivariate DNA/bromodeoxyuridine anal. with a flow cytometer showed that chlorovulone I transiently arrested the cell cycle progression from G1 to S after 24-h exposure to the nontoxic concns. (0.03 and 0.09 μ M) and caused the lasting blockade of leukemia cells in G1 at the cytotoxic concentration. Apparently, these coral prostanoids and related compds. may be a promising antileukemic agent.

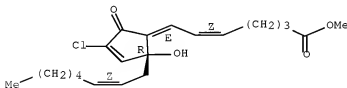
IT 100295-81-6, Chlorovulone I 105343-03-1, Iodovulone I 105343-04-2, Bromovulone I 105560-77-8, (-)-Chlorovulone II 111695-42-2 111695-43-3

RL: BIOL (Biological study)
(leukemia from human growth inhibition by)

RN 100295-81-6 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

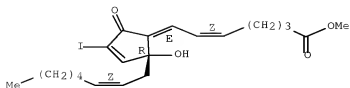
Absolute stereochemistry.
Double bond geometry as shown.



RN 105343-03-1 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

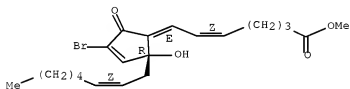


RN 105343-04-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-ol-10-yl methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

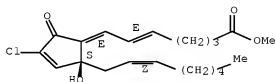


RN 105560-77-8 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-ol-10-yl methyl ester, (5E,7E,12α,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

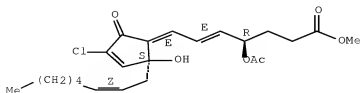


RN 111695-42-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-ol-10-yl methyl ester, 4-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (4R,5E,7E,12α,14Z)- (9CI) (CA INDEX NAME)

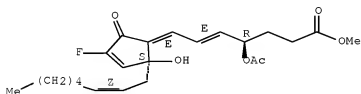
Absolute stereochemistry.

Double bond geometry as shown.



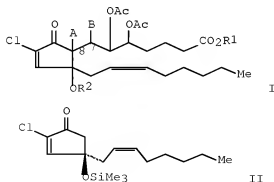
RN 111695-43-3 HCAPLUS
 CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-fluoro-12-hydroxy-9-oxo-, methyl ester, (4R,5E,7E,12 α ,14Z)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



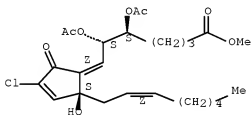
L43 ANSWER 34 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1987:439505 HCAPLUS Full-text
 DOCUMENT NUMBER: 107:39505
 ORIGINAL REFERENCE NO.: 107:6599a,6602a
 TITLE: Preparation of punaglandin derivatives
 INVENTOR(S): Noyori, Ryoji; Suzuki, Masaaki; Kurozumi, Seiji
 PATENT ASSIGNEE(S): Teijin Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| JP 62059258 | A | 19870314 | JP 1985-197688 | 19850909 <-- |
| PRIORITY APPLN. INFO.: OTHER SOURCE(S): CASREACT 107:39505 | | | JP 1985-197688 | 19850909 <-- |
| ED Entered STN: 08 Aug 1987 | | | | |
| GI | | | | |



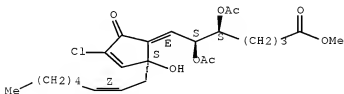
- AB Punaglandin derivs. (I; R1 = C1-10 alkyl; R2 = H, protecting group; A = H when B = OH, AB = bond), useful as anticancer and antiviral agents, are prepared (Me2CH)2NLi (0.4M) in THF was added to a solution of 0.36 mmol enone derivative II in THF at -78°, followed by 0.37 mmol HCOCH(OAc)CH(OAc)(CH2)3CO2Me in THF, cooled to -95°, and adjusted to pH 7.4 with phosphate buffer to give a mixture of 2 diastereomers I (A = H, B = OH, R1 = Me, R2 = Me3Si) in 13% and 4% yield, resp., which was dehydrated to give 37% dienone derivative I (AB = bond, R1 = Me, R2 = Me3Si) (III). Hydrolysis of 1.8 mg III in HOAc-H2O-THF at 0-30° gave a mixture of 0.5 mg (E)- and 0.8 mg (Z)-I (AB = bond, R1 = Me, R2 = H; isomeric about C-7-8).
- IT 105927-55-7P 105927-56-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as anticancer and antiviral agent)
- RN 105927-55-7 HCAPLUS
- CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,12α,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



- RN 105927-56-8 HCAPLUS
- CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,12α,14Z)- (9CI) (CA INDEX NAME)

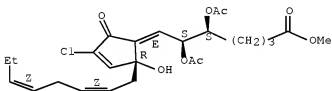
Absolute stereochemistry.
 Double bond geometry as shown.



- L43 ANSWER 35 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
- ACCESSION NUMBER: 1987:423115 HCAPLUS [Full-text](#)
- DOCUMENT NUMBER: 107:23115
- ORIGINAL REFERENCE NO.: 107:3899a,3902a
- TITLE: Synthesis of antitumor marine prostanoids
- AUTHOR(S): Nagaoka, Hiroto; Yamada, Yasuji
- CORPORATE SOURCE: Tokyo Coll. Pharm., Hachioji, 192-03, Japan

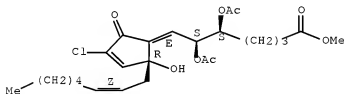
SOURCE: Yuki Gosei Kagaku Kyokaishi (1986), 44(12), 1145-54
 CODEN: YGKKAE; ISSN: 0372-770X
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: Japanese
 ED Entered STN: 25 Jul 1987
 AB A review with 27 refs. (mostly since 1980) on synthesis of antitumor marine prostamoids, clavulones, chlorovulones, and punaglandins 3 and 4.
 IT 96055-65-1P, Punaglandin 3 96055-66-2P, Punaglandin 4
 RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (synthesis of)
 RN 96055-65-1 HCAPLUS
 CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 96055-66-2 HCAPLUS
 CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

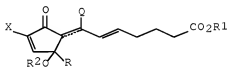
Absolute stereochemistry.
 Double bond geometry as shown.



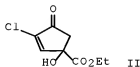
L43 ANSWER 36 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1987:175830 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 106:175830
 ORIGINAL REFERENCE NO.: 106:28525a,28528a
 TITLE: 2-Halo-2-cyclopentenone derivatives as antitumor agents
 INVENTOR(S): Nakamoto, Yasumasa; Ishizuka, Yoriyasu; Miyamura, Yoshio; Togashi, Masahiro; Nagai, Zene; Tsuji, Shunichi; Morikawa, Susumu
 PATENT ASSIGNEE(S): Nihon Iyakuin Kogyo Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent

LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| JP 62000044 | A | 19870106 | JP 1985-136767 | 19850625 <-- |
| PRIORITY APPLN. INFO.: ED Entered STN: 29 May 1987 | | | JP 1985-136767 | 19850625 <-- |
| GI | | | | |



I



II

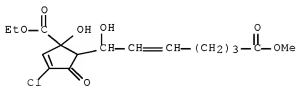
AB 2-Halo-2-cyclopentenone derivs. (I; X = halo; R = alkyl, alkoxy, carbonyl, etc.; R1 = H, alkyl; R2 = H, alkyl, protecting group; Q = OH with single bond, H with double bond), useful as antitumor agents, are prepared. Cyclopentenone derivative II in THF was treated with BuLi in hexane and hexamethyldisilazane in THF at -70 to -20°. Bu3SnCl and Me 7-oxo-5-heptenoate in THF at -60 to -55° were added to give 43.8% I (X = Cl, R = Et, R1 = Me, R2 = H, Q = OH, single bond). In vitro screening tests using L1210 mouse leukemia cells showed that I had IC50 values ranging from 0.04-2.70 µg/mL.

IT 107836-91-9P 107836-92-0P 107836-93-1E
 107836-94-2P 107836-95-3P 107836-96-4E
 107836-98-6P 107836-99-7P 107837-01-4P
 107837-02-5P 107837-03-6P 107837-04-7P
 107837-08-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of, as antitumor agent)

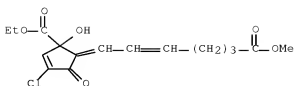
RN 107836-91-9 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, ethyl ester (CA INDEX NAME)



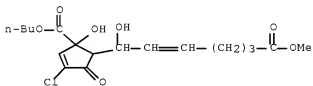
RN 107836-92-0 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, ethyl ester (CA INDEX NAME)



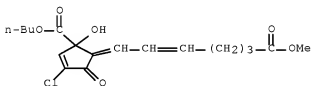
RN 107836-93-1 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, butyl ester (CA INDEX NAME)



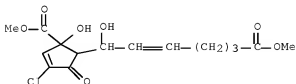
RN 107836-94-2 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, butyl ester (CA INDEX NAME)



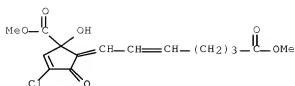
RN 107836-95-3 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, methyl ester (CA INDEX NAME)



RN 107836-96-4 HCAPLUS

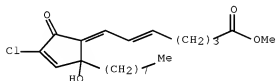
CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, methyl ester (CA INDEX NAME)



RN 107836-98-6 HCAPLUS

CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (12 ξ)-(9CI) (CA INDEX NAME)

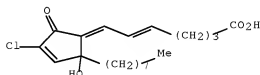
Double bond geometry unknown.



RN 107836-99-7 HCAPLUS

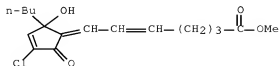
CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, (12 ξ)-(9CI) (CA INDEX NAME)

Double bond geometry unknown.



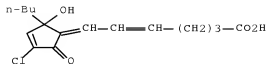
RN 107837-01-4 HCAPLUS

CN 5-Heptenoic acid, 7-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)-, methyl ester (CA INDEX NAME)



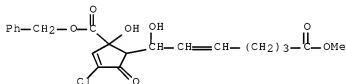
RN 107837-02-5 HCAPLUS

CN 5-Heptenoic acid, 7-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)- (CA INDEX NAME)



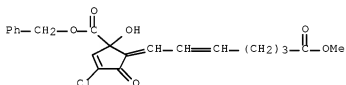
RN 107837-03-6 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, phenylmethyl ester (CA INDEX NAME)



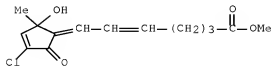
RN 107837-04-7 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, phenylmethyl ester (CA INDEX NAME)



RN 107837-08-1 HCAPLUS

CN 5-Heptenoic acid, 7-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)-, methyl ester (CA INDEX NAME)



IT 107836-91-9P 107836-93-1P

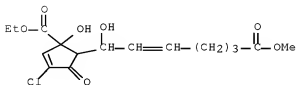
RL: SPN (Synthetic preparation); PREP (Preparation)

Serial No.:10/521,570

(preparation of, as intermediate for antitumor cyclopentenone derivs.)

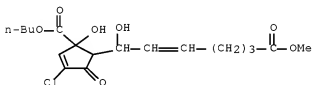
RN 107836-91-9 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, ethyl ester (CA INDEX NAME)



RN 107836-93-1 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, butyl ester (CA INDEX NAME)



IT 107836-95-3P 107836-98-6P 107837-01-4P

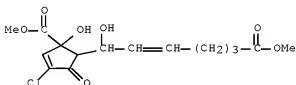
107837-03-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as intermediate for antitumor halocyclopentenones)

RN 107836-95-3 HCAPLUS

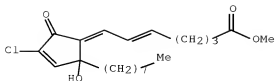
CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, methyl ester (CA INDEX NAME)



RN 107836-98-6 HCAPLUS

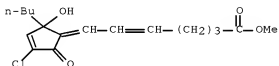
CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (12 ξ)- (9CI) (CA INDEX NAME)

Double bond geometry unknown.



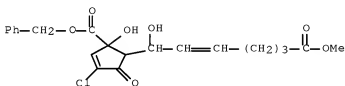
RN 107837-01-4 HCAPLUS

CN 5-Heptenoic acid, 7-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)-, methyl ester (CA INDEX NAME)



RN 107837-03-6 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, phenylmethyl ester (CA INDEX NAME)



L43 ANSWER 37 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:119344 HCAPLUS Full-text

DOCUMENT NUMBER: 106:119344

ORIGINAL REFERENCE NO.: 106:19486h,19487a

TITLE: 2-Halo-5-(6-carboxyhexylidene)-2-cyclopentenone analogs

INVENTOR(S): Nakamoto, Yasumasa; Ishizuka, Yoriyasu; Miyamura, Yoshio; Togashi, Masahiro; Fujii, Masahiro; Kato, Yuichi; Nagai, Zene; Tsuji, Shunichi; Morikawa, Susumu; Ohira, Yutaka

PATENT ASSIGNEE(S): Nihon Iyakuin Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

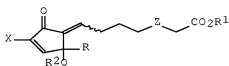
KIND DATE

APPLICATION NO.

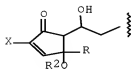
DATE

JP 61205230 A 19860911
 PRIORITY APPLN. INFO.:
 ED Entered STN: 17 Apr 1987
 GI

JP 1985-45735 19850309 <--
 JP 1985-45735 19850309 <--



I



III

AB The title compds. [I; R = alkyl, alkoxy, carbonyl; R1 = H, lower alkyl; R2 = H, acyl, tetrahydropyran-2-yl (THP), tetrahydrofuran-2-yl; X = halo; Z = CH2, O, S], useful as anticancer agents, were prepared via aldol condensation of 2-halo-2-cyclopentenone derivs. with OHC(CH2)3ZCH2CO2R1 (II; R1 = lower alkyl) and dehydration of the resulting cyclopentenone derivs. III. Thus, a solution of 4-n-butyl-2-chloro-4-(tetrahydropyran-2-yloxy)-2-cyclopentenone in THF was added dropwise at -55° to a mixture of Me3SiNHSSiMe3 and n-BuLi in THF and after 0.5 h at -30°, II (Z = O; R1 = Me) in THF was added to the mixture. The resulting mixture was allowed to react at -50° to -30° for 1 h to give 35.6% III (R = H, R1 = Me, R2 = THP, X = Cl, Z = O). Treatment of this with MeSO2Cl in CH2Cl2 containing Et3N at room temperature for 1 h gave 40% I (R = H, R1 = Me, R2 = THP, X = Cl, Z = O). I at 0.06-0.10 µg/mL in vitro inhibited by 50% the growth of mouse leukemia cells L1210.

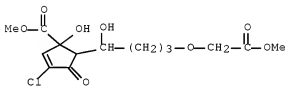
IT 107008-54-8P 107022-64-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and dehydration of)

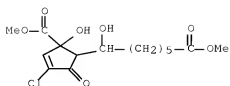
RN 107008-54-8 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[1-hydroxy-4-(2-methoxy-2-oxoethoxy)butyl]-4-oxo-, methyl ester (CA INDEX NAME)



RN 107032-64-4 HCAPLUS

CN 3-Cyclopentene-1-heptanoic acid, 3-chloro-ζ,5-dihydroxy-5-(methoxycarbonyl)-2-oxo-, methyl ester (CA INDEX NAME)



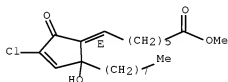
IT 102355-12-4P 107008-39-9P 107008-46-2P
 107008-46-8P 107008-49-1P 107008-51-5P
 107008-52-6P 107008-53-7P 107008-55-9P
 107008-57-1P 107008-59-3P 107008-61-7P
 107008-63-8P 107008-77-5P 107032-62-2P
 107032-63-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of, as anticancer agent)

RN 102355-12-4 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (7E,12E)- (9CI) (CA INDEX NAME)

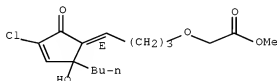
Double bond geometry as shown.



RN 107008-39-9 HCAPLUS

CN Acetic acid, [4-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)butoxy]-, methyl ester, (E)- (9CI) (CA INDEX NAME)

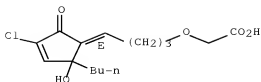
Double bond geometry as shown.



RN 107008-40-2 HCAPLUS

CN Acetic acid, [4-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)butoxy]-, (E)- (9CI) (CA INDEX NAME)

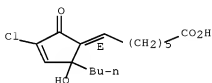
Double bond geometry as shown.



RN 107008-46-8 HCAPLUS

CN Heptanoic acid, 7-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)-, (E)- (9CI) (CA INDEX NAME)

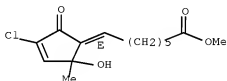
Double bond geometry as shown.



RN 107008-49-1 HCAPLUS

CN Heptanoic acid, 7-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)-, methyl ester, (E)- (9CI) (CA INDEX NAME)

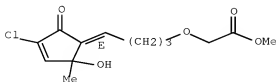
Double bond geometry as shown.



RN 107008-51-5 HCAPLUS

CN Acetic acid, [4-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)butoxy]-, methyl ester, (E)- (9CI) (CA INDEX NAME)

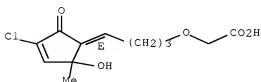
Double bond geometry as shown.



RN 107008-52-6 HCAPLUS

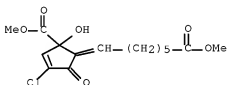
CN Acetic acid, [4-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)butoxy]-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 107008-53-7 HCAPLUS

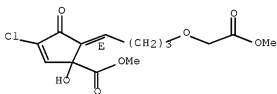
CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxoheptylidene)-4-oxo-, methyl ester (CA INDEX NAME)



RN 107008-55-9 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[4-(2-methoxy-2-oxoethoxy)butylidene]-4-oxo-, methyl ester, (E)- (9CI) (CA INDEX NAME)

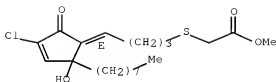
Double bond geometry as shown.



RN 107008-57-1 HCAPLUS

CN Acetic acid, [[4-(4-chloro-2-hydroxy-2-octyl-5-oxo-3-cyclopenten-1-ylidene)butyl]thio]-, methyl ester, (E)- (9CI) (CA INDEX NAME)

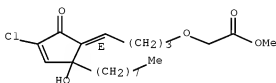
Double bond geometry as shown.



RN 107008-59-3 HCAPLUS

CN Acetic acid, [4-(4-chloro-2-hydroxy-2-octyl-5-oxo-3-cyclopenten-1-ylidene)butoxy]-, methyl ester, (E)- (9CI) (CA INDEX NAME)

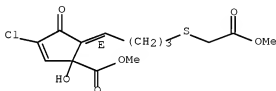
Double bond geometry as shown.



RN 107008-61-7 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[4-[(2-methoxy-2-oxoethyl)thio]butylidene]-4-oxo-, methyl ester, (E)- (9CI) (CA INDEX NAME)

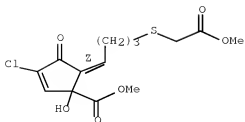
Double bond geometry as shown.



RN 107008-62-8 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[4-[(2-methoxy-2-oxoethyl)thio]butylidene]-4-oxo-, methyl ester, (Z)- (9CI) (CA INDEX NAME)

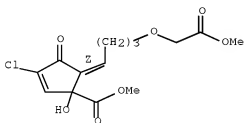
Double bond geometry as shown.



RN 107008-77-5 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[4-(2-methoxy-2-oxoethoxy)butylidene]-4-oxo-, methyl ester, (Z)- (9CI) (CA INDEX NAME)

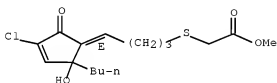
Double bond geometry as shown.



RN 107032-62-2 HCAPLUS

CN Acetic acid, [[4-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)butyl]thio]-, methyl ester, (E)- (9CI) (CA INDEX NAME)

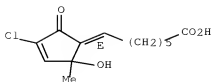
Double bond geometry as shown.



RN 107032-63-3 HCAPLUS

CN Heptanoic acid, 7-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L43 ANSWER 38 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:13065 HCAPLUS Full-text

DOCUMENT NUMBER: 106:13065

ORIGINAL REFERENCE NO.: 106:2157a,2160a

TITLE: Antitumor eicosanoids: natural occurrence and drug design

AUTHOR(S): Fukushima, M.

CORPORATE SOURCE: Dep. Intern. Med., Aichi Cancer Cent., Nagoya, Japan

SOURCE: Recent Adv. Chemother., Proc. Int. Congr. Chemother., 14th (1985), Volume Anticancer Sect. 1, 25-7. Editor(s): Ishigami, Joji. Univ. Tokyo Press: Tokyo, Japan.

CODEN: 55GNAX

DOCUMENT TYPE: Conference

LANGUAGE: English

ED Entered STN: 24 Jan 1987

AB The antitumor activities of alkylidenecyclopentenone prostaglandins, such as Δ^7 -PGA1 [92340-58-4] and Δ^{12} -13,14-dihydro-PGJ2 [97588-64-2], and the marine eicosanoids, clavilones and prostaglandins, were compared and structure-activity relations were determined. The results indicated that the cyclopentenone ring was required for antitumor activity, and cytotoxicity could be potentiated by the presence of 10-Cl and 12-OH groups. Both 10-Cl and 12-OH groups were required to produce full cytotoxicity. The cytotoxicity of 10-Cl,12-OH- Δ^7 -PGA1 [105801-34-1] was almost equal to that of vincristine or doxorubicin, and this structure may serve as the basis of a new class of antitumor agents.

IT 105801-34-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

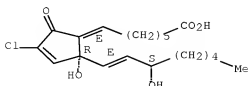
(neoplasm-inhibiting activity of, structure in relation to)

RN 105801-34-1 HCAPLUS

CN Prosta-7,10,13-trien-1-oic acid, 10-chloro-12,15-dihydroxy-9-oxo-, (7E,13E,15S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 39 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:4706 HCAPLUS Full-text

DOCUMENT NUMBER: 106:4706

ORIGINAL REFERENCE NO.: 106:879a,882a

TITLE: Studies on marine natural products. XIII.
 Determination of absolute configuration of
 chlorovulones by CD measurement and by
 enantioselective synthesis of (-)-chlorovulone II
 Nagaoka, Hiroto; Iguchi, Kazuo; Miyakoshi, Tohru;
 Yamada, Nobuko; Yamada, Yasuji

AUTHOR(S): Tokyo Coll. Pharm., Hachioji, 192-03, Japan

CORPORATE SOURCE: Tetrahedron Letters (1986), 27(2), 223-6

SOURCE: CODEN: TELEAY; ISSN: 0040-4039

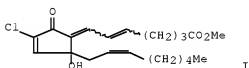
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 106:4706

ED Entered STN: 11 Jan 1987

GI



I

AB Absolute configuration of chlorovulones I-IV (I) new halogenated marine
 prostanoids with antitumor activity, isolated from the stolonifer Clavularia
 viridis Quoy and Gaimard, has been established on the basis of the CD
 measurements of chlorovulone derivs. and of the enantioselective synthesis of
 (-)-chlorovulone II (E,E-I).

IT 106201-69-2, Chlorovulone IV 100295-79-2, Chlorovulone

III 100295-80-5, Chlorovulone II 100295-81-6,

Chlorovulone I

RL: PRP (Properties)

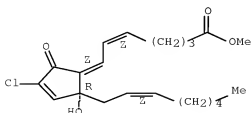
(mol. structure of)

RN 100201-69-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl
 ester, (5Z,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

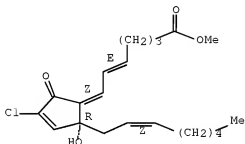


RN 100295-79-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

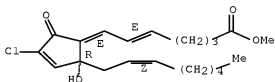


RN 100295-80-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

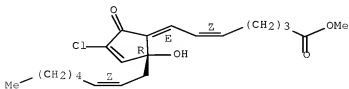


RN 100295-81-6 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 105560-77-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

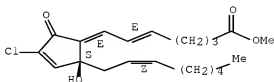
(total synthesis of)

RN 105560-77-8 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,12a,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 40 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:623048 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 105:223048

ORIGINAL REFERENCE NO.: 105:35963a,35966a

TITLE: Bromovulone I and iodovulone I, unprecedented brominated and iodinated marine prostanoids with antitumor activity isolated from the Japanese stolonifer *Clavularia viridis* Quoy and Gaimard

AUTHOR(S): Iguchi, Kazuo; Kaneta, Soichiro; Mori, Kenichiro; Yamada, Yasuji; Honda, Atsushi; Mori, Yo

CORPORATE SOURCE: Lab. Org. Chem., Tokyo Coll. Pharm., Tokyo, 192-03, Japan

SOURCE: Journal of the Chemical Society, Chemical Communications (1986), (12), 981-2

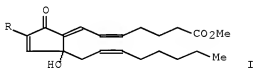
CODEN: JCCCAT; ISSN: 0022-4936

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 26 Dec 1986

GI



AB Bromovulone I and iodovulone I (I, R = Br or I, resp.), were isolated from Et2O exts. of *C. viridis* and their structures were determined by spectral means. Both compds. showed good antiproliferative and cytotoxic activity in human promyelocytic leukemia cells in vitro.

IT 105343-03-1 105343-04-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

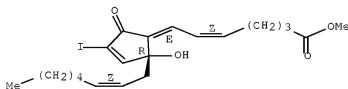
(from stolonifer, structure and antitumor activity of)

RN 105343-03-1 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

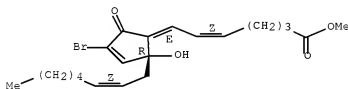


RN 105343-04-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-bromo-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 41 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:614107 HCAPLUS Full-text

DOCUMENT NUMBER: 105:214107

ORIGINAL REFERENCE NO.: 105:34437a,34440a

TITLE: Antiinflammatory method

INVENTOR(S): Mynderse, Jon S.; Bonjouklian, Rosanne

PATENT ASSIGNEE(S): Eli Lilly and Co., USA

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| ----- | | ----- | ----- | ----- |
| US 4612330 | A | 19860916 | US 1985-697997 | 19850204 <-- |
| PRIORITY APPLN. INFO.: | | | US 1985-697997 | 19850204 <-- |

ED Entered STN: 13 Dec 1986

AB Punaglandin-1 and Punaglandin-2 are effective in treating inflammation and arthritis. The compds. may be administered by various routes including oral, rectal, transdermal, s.c., i.v., i.m., or intranasal. Thus, a hard gelatin capsule contained Punaglandin-1 250, dried starch 200; and Mg stearate 10 mg.

IT 96055-63-9 96055-64-0

RL: BIOL (Biological study)

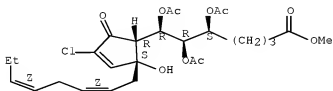
(inflammation inhibitor)

RN 96055-63-9 HCAPLUS

CN Prosta-10,14,17-trien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

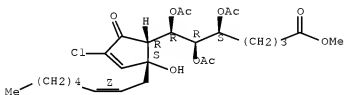


RN 96055-64-0 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 42 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:572100 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 105:172100

ORIGINAL REFERENCE NO.: 105:27725a,27728a

TITLE: Prostaglandin synthesis. 12. Synthesis of (7E)- and

(7Z)-punaglandin 4. Structural revision

AUTHOR(S): Suzuki, M.; Morita, Y.; Yanagisawa, A.; Noyori, R.;

Baker, Bill J.; Scheuer, Paul J.

CORPORATE SOURCE: Dep. Chem., Nagoya Univ., Nagoya, 464, Japan

SOURCE: Journal of the American Chemical Society (1986

), 108(16), 5021-2

CODEN: JACSAT; ISSN: 0002-7863

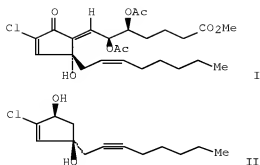
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 105:172100

ED Entered SIN: 15 Nov 1986

GI



AB Punaglandin 4 was shown to have structure I (and the Z isomer) by total synthesis of all relevant diastereoisomers and comparison with the natural product. The crystal structure of cyclopentenedione II was determined

IT 96055-66-2P 96055-68-4P 105927-55-7P
105927-56-8P

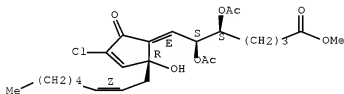
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and absolute configuration of)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

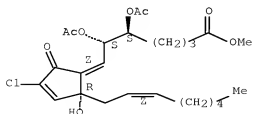


RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

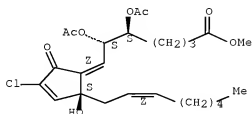


RN 105927-55-7 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,12 α ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

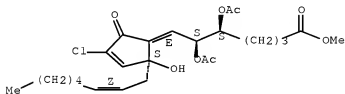


RN 105927-56-8 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,12 α ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 103384-65-2P 103384-66-3P 103384-67-4P

103384-68-5P

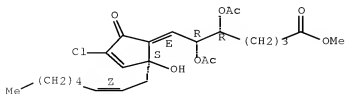
RL: SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of)

RN 103384-65-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5R,6R,7E,12 α ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

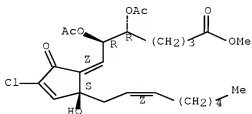


RN 103384-66-3 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5R,6R,7Z,12a,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

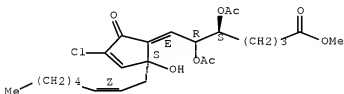


RN 103384-67-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,12a,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

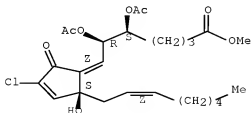


RN 103384-68-5 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7Z,12a,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



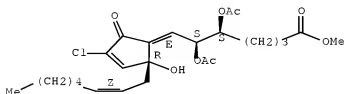
IT 56055-66-2P 96055-68-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(total synthesis of, revision of punaglandin configuration in relation

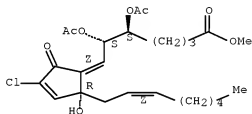
to)
 RN 96055-66-2 HCAPLUS
 CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

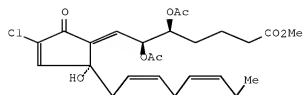


RN 96055-68-4 HCAPLUS
 CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

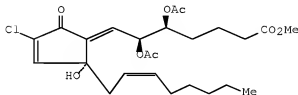
Absolute stereochemistry.
 Double bond geometry as shown.



L43 ANSWER 43 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1986:572099 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 105:172099
 ORIGINAL REFERENCE NO.: 105:27725a,27728a
 TITLE: Synthesis of punaglandin 3 and 4. Revision of the structures
 AUTHOR(S): Nagaoka, Hiroto; Miyaoka, Hiroaki; Miyakoshi, Thu; Yamada, Yasuji
 CORPORATE SOURCE: Tokyo Coll. Pharm., Tokyo, 192-03, Japan
 SOURCE: Journal of the American Chemical Society (1986), 108(16), 5019-21
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 105:172099
 ED Entered STN: 15 Nov 1986
 GI



I



II

AB Total chiral synthesis of all relevant diastereoisomers established the structures of punaglandins 3 and 4 as I and II, resp., instead of the C-12(S) isomers, as proposed earlier.

IT 96055-66-2P 103304-67-4P 103531-36-8P

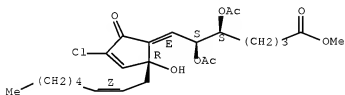
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

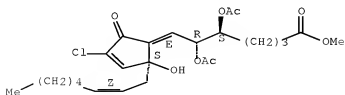


RN 103384-67-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,12α,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

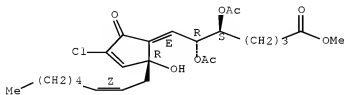


RN 103531-36-8 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 96055-65-1P 96055-66-2P

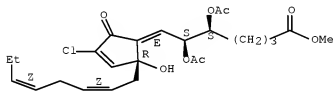
RL: SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of)

RN 96055-65-1 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

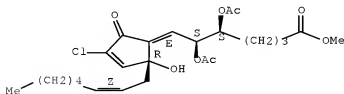


RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 44 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:533647 HCAPLUS [Full-text](#)

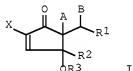
DOCUMENT NUMBER: 105:133647

ORIGINAL REFERENCE NO.: 105:21561a,21564a

Serial No.:10/521,570

TITLE: Antitumor 4-hydroxy-2-cyclopentenones
 INVENTOR(S): Hazato, Atsuo; Sugiura, Satoshi; Kurozumi, Seizi;
 Noyori, Ryoji
 PATENT ASSIGNEE(S): Teijin Ltd., Japan
 SOURCE: Eur. Pat. Appl., 66 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------|------|--|-----------------|----------------|
| EP 180399 | A2 | 19860507 | EP 1985-307631 | 19851022 <-- |
| EP 180399 | A3 | 19870616 | | |
| EP 180399 | B1 | 19920520 | | |
| R: CH, DE, FR, GB, IT, LI, SE | | | | |
| JP 61100542 | A | 19860519 | JP 1984-220475 | 19841022 <-- |
| JP 02020616 | B | 19900510 | | |
| JP 61100538 | A | 19860519 | JP 1984-220476 | 19841022 <-- |
| JP 61189245 | A | 19860822 | JP 1985-28429 | 19850218 <-- |
| JP 04019214 | B | 19920330 | | |
| JP 61291538 | A | 19861222 | JP 1985-130845 | 19850618 <-- |
| JP 06035422 | B | 19940511 | | |
| PRIORITY APPLN. INFO.: | | | JP 1984-220475 | A 19841022 <-- |
| | | | JP 1984-220476 | A 19841022 <-- |
| | | | JP 1985-28429 | A 19850218 <-- |
| | | | JP 1985-130845 | A 19850618 <-- |
| OTHER SOURCE(S): | | CASREACT 105:133647; MARPAT 105:133647 | | |
| ED Entered STN: 18 Oct 1986 | | | | |
| GI | | | | |



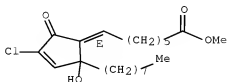
AB Cyclopentenones I [X = H, halo; A = H; B = OH, AB = bond; R1 = C1-10 (un)substituted alkyl, alkenyl, alkynyl; R2 = C1-10 (un)substituted alkyl, alkenyl, alkynyl; R3 = H, OH-protective group when R2 ≠ 2-octenyl, 8-acetoxy-2-octenyl, 2,5-octadienyl], useful as antitumor agents, are prepared. Thus, (E)- and (Z)-2-chloro-4-hydroxy-5-(6-methoxycarbonylhexylidene)-4-octyl-2-cyclopentenone were prepared in 6 steps from 3-chloro-4-tert-butylidimethylsilyloxy-2-cyclopentenone and Me(CH₂)₇MgBr. The IC₅₀ (inhibitory concentration) of 2-chloro-4-hydroxy-4-[3-(3,4-dimethoxyphenyl)propyl]-2-(6-methoxycarbonylhexylidene)-2-cyclopentenone was 0.06 µg/mL vs. L1210 leukemia cells *in vitro*.

IT 102355-12-4P 102355-13-5P 104248-43-3P
 104248-48-3P 104243-51-3P 104248-75-1P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation of, as antitumor agent)

RN 102355-12-4 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (7E,12E)- (9CI) (CA INDEX NAME)

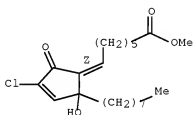
Double bond geometry as shown.



RN 102355-13-5 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (7Z,12E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

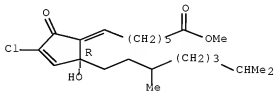


RN 104248-43-3 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-15,19-dimethyl-9-oxo-, methyl ester (9CI) (CA INDEX NAME)

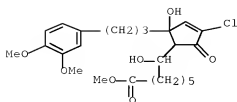
Absolute stereochemistry.

Double bond geometry unknown.



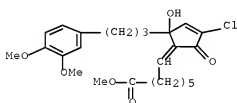
RN 104248-48-8 HCAPLUS

CN 3-Cyclopentene-1-heptanoic acid, 3-chloro-5-[3-(3,4-dimethoxyphenyl)propyl]-, 5-dihydroxy-2-oxo-, methyl ester (CA INDEX NAME)



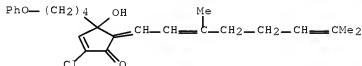
RN 104248-51-3 HCAPLUS

CN Heptanoic acid, 7-[4-chloro-2-[3-(3,4-dimethoxyphenyl)propyl]-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene]-, methyl ester (CA INDEX NAME)



RN 104248-75-1 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-5-(3,7-dimethyl-2,6-octadien-1-ylidene)-4-hydroxy-4-(4-phenoxybutyl)- (CA INDEX NAME)



L43 ANSWER 45 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:406327 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 105:6327

ORIGINAL REFERENCE NO.: 105:1177a,1180a

TITLE: Synthesis of punaglandins and related compounds

AUTHOR(S): Suzuki, Masaaki; Morita, Yasushi; Yanagisawa, Akira; Noyori, Ryoji

CORPORATE SOURCE: Dep. Chem., Nagoya Univ., Japan

SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (

1985), 27th, 397-404

CODEN: TYKYDS

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

ED Entered STN: 13 Jul 1986

AB Review with 12 refs.

IT 96055-63-3P 96055-64-0P 96055-65-1P

96055-66-2P 102355-12-4P

Serial No.:10/521,570

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

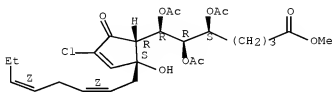
(preparation and antitumor activity of)

RN 96055-63-9 HCAPLUS

CN Prosta-10,14,17-trien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

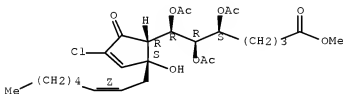


RN 96055-64-0 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

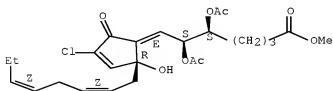


RN 96055-65-1 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

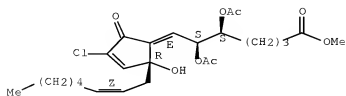
Double bond geometry as shown.



RN 96055-66-2 HCAPLUS

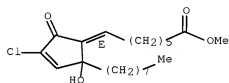
CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

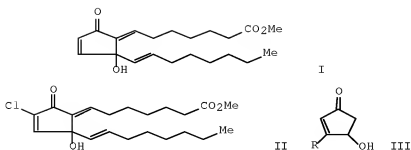


RN 102355-12-4 HCAPLUS
CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,
(7E,12E)-(9CI) (CA INDEX NAME)

Double bond geometry as shown.



L43 ANSWER 46 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:224750 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 104:224750
ORIGINAL REFERENCE NO.: 104:35643a,35646a
TITLE: Prostaglandin chemistry. XXVIII. Synthesis of new
antineoplastic alkylidenecyclopentenones
AUTHOR(S): Sugiura, Satoshi; Hazato, Atsuo; Tanaka, Toshio;
Okamura, Noriaki; Bannai, Kiyoshi; Manabe, Kenji;
Kurozumi, Seizi; Suzuki, Masaaki; Noyori, Ryoji
CORPORATE SOURCE: Inst. Bio-Med. Res., Teijin Ltd., Hino, 191, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1985),
33(9), 4120-3
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 104:224750
ED Entered STN: 27 Jun 1986
GI



AB The clavulone analog I, the punaglandin analog II, and their ω -chain-saturated analogs were prepared from, e.g., the cyclopentenones III (R = H, Cl). The compds. had potent growth-inhibiting activity against L1210 tumor cells.

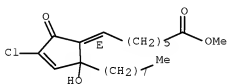
IT 102355-12-4P 102355-13-5P 102419-55-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 102355-12-4 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (7E,12 ξ)- (9CI) (CA INDEX NAME)

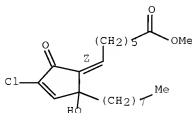
Double bond geometry as shown.



RN 102355-13-5 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (7Z,12 ξ)- (9CI) (CA INDEX NAME)

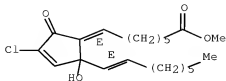
Double bond geometry as shown.



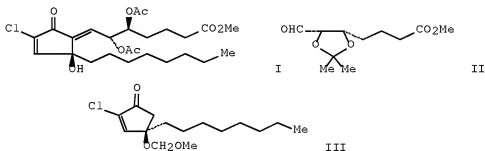
RN 102419-55-6 HCAPLUS

CN Prosta-7,10,13-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (7E,12 ξ ,13E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

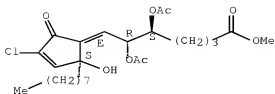


L43 ANSWER 47 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1986:224749 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 104:224749
 ORIGINAL REFERENCE NO.: 104:35643a,35646a
 TITLE: Synthesis of a halogenated clavulone analog
 AUTHOR(S): Nagaoka, Hiroto; Miyakoshi, Tohru; Kasuga, Junichi; Yamada, Yasuji
 CORPORATE SOURCE: Tokyo Coll. Pharm., Hachioji, 192-03, Japan
 SOURCE: Tetrahedron Letters (1985), 26(41), 5053-6
 CODEN: TELEAY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 104:224749
 ED Entered STN: 27 Jun 1986
 GI



AB Chiral 10-chloroclavulone I was prepared via coupling of the key intermediates II and III. I had 10 times the growth inhibiting activity of clavulone II toward melanoma B16 cells.
 IT 102354-92-7P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 102354-92-7 HCAPLUS
 CN Prosta-7,10-dien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,12α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



IT 102354-91-6P

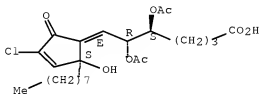
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for punaglandin derivative)

RN 102354-91-6 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, (5S,6R,7E,12α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 48 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:193175 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 104:193175

ORIGINAL REFERENCE NO.: 104:30483a,30486a

TITLE: Punaglandins and pharmaceutical use thereof
Fukushima, Masanori; Kurozumi, Seizi; Scheuer, Paul J.; Yu, Patrick T. K.

INVENTOR(S): University of Hawaii, USA

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

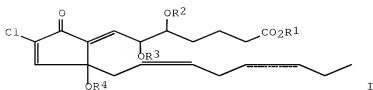
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------------|
| WO 8503706 | A1 | 19850829 | WO 1985-US226 | 19850214 <-- |
| W: JP | | | | |
| RW: CH, DE, FR, GB | | | | |
| EP 172233 | A1 | 19860226 | EP 1985-901218 | 19850214 <-- |
| R: CH, DE, FR, GB, LI | | | | |
| JP 61501703 | T | 19860814 | JP 1985-501005 | 19850214 <-- |
| PRIORITY APPLN. INFO.: | | | US 1984-579933 | A 19840214 <-- |
| | | | WO 1985-US226 | W 19850214 <-- |

OTHER SOURCE(S): MARPAT 104:193175

ED Entered STN: 01 Jun 1986

GI



AB Punaglandins I (R1 = H, C1-10 alkyl, or cation; R2-R4 = H, C2-10 acyl) have antitumor activity. Punaglandin 3 (II) and punaglandin 4 (III) (R1 = Me; R2-3 = Ac; R4 = H; double bond for II, single bond for III) are extracted from the *Telesto riisei*. II and III showed IC50 values of 0.10 and 0.030 µg/mL against the proliferation of L 1210 carcinoma cells in culture.

IT 96055-65-1 96055-66-2

RL: PROC (Process)

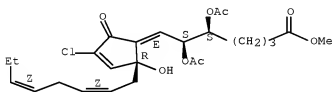
(isolation of, from *Telesto riisei*, as neoplasm inhibitor)

RN 96055-65-1 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

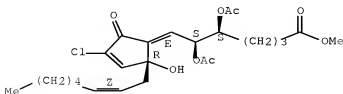


RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

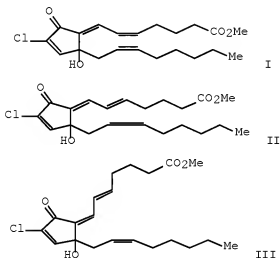
Absolute stereochemistry.

Double bond geometry as shown.



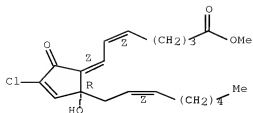
Serial No.:10/521,570

ACCESSION NUMBER: 1986:85634 HCAPLUS Full-text
 DOCUMENT NUMBER: 104:85634
 ORIGINAL REFERENCE NO.: 104:13541a,13544a
 TITLE: Marine natural products. Part XII. Chlorovulones, new halogenated marine prostanoids with an antitumor activity from the stolonifer *Clavularia viridis* Quoy and Gaimard
 AUTHOR(S): Iguchi, Kazuo; Kaneta, Soichiro; Mori, Kenichiro; Yamada, Yasuji; Honda, Atsushi; Mori, Yo
 CORPORATE SOURCE: Tokyo Coll. Pharm., Hachioji, 192-03, Japan
 SOURCE: Tetrahedron Letters (1985), 26(47), 5787-90
 CODEN: TELEAY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 22 Mar 1986
 GI



AB New halogenated marine prostanoids, chlorovulone I, II, and III (I-III, resp.) were isolated from the stolonifer *C. viridis*. The structure elucidation and the antitumor activity of chlorovulones were described.
 IT 100201-69-2 100295-79-2 100295-80-5
 100295-81-6
 RL: BIOL (Biological study)
 (of stolonifer, structure of)
 RN 100201-69-2 HCAPLUS
 CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

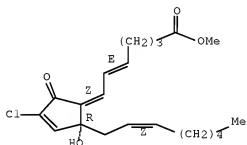


RN 100295-79-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

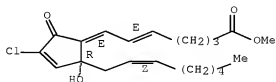


RN 100295-80-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

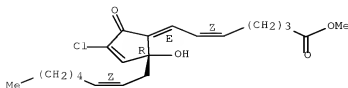


RN 100295-81-6 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

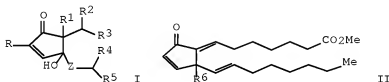
Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 50 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1985:615067 HCAPLUS Full-text
 DOCUMENT NUMBER: 103:215067
 ORIGINAL REFERENCE NO.: 103:34655a,34658a
 TITLE: 4-Hydroxy-2-cyclopentenone derivatives
 PATENT ASSIGNEE(S): Teijin Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

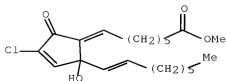
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------|------|----------|-----------------|--------------|
| JP 60097926 | A | 19850531 | JP 1983-205868 | 19831104 <-- |
| JP 04063056 | B | 19921008 | | |
| PRIORITY APPLN. INFO.: | | | JP 1983-205868 | 19831104 <-- |
| ED Entered STN: 28 Dec 1985 | | | | |
| GI | | | | |



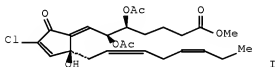
AB Title compds. I [R = H, halo; R1, R2 = H, OH; R1R2 = bond; R3 = H, (un)substituted alkyl, alkenyl, cycloalkyl; R4 = alkyl, cycloalkyl; R5 = H, OH, protected OH; Z = C.tplbond.C, CH:CH, CH2CH2], useful as anticancers and virucides (no data), were prepared Thus, stirring cyclopentenone II (R6 = H) with Me3COOH in benzene gave 10% II (R6 = OH).

IT 99210-09-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 99210-09-0 HCAPLUS
 CN Prosta-7,10,13-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (12ξ)- (9CI) (CA INDEX NAME)

Double bond geometry unknown.

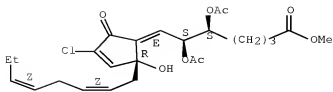


L43 ANSWER 51 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1985:218647 HCAPLUS Full-text
 DOCUMENT NUMBER: 102:218647
 ORIGINAL REFERENCE NO.: 102:34255a,34258a
 TITLE: Punaglandins: halogenated antitumor eicosanoids from the octocoral *Telesto riisei*
 AUTHOR(S): Baker, Bill J.; Okuda, Roy K.; Yu, Patrick T. K.; Scheuer, Paul J.
 CORPORATE SOURCE: Dep. Chem., Univ. Hawaii Manoa, Honolulu, HI, 96822, USA
 SOURCE: Journal of the American Chemical Society (1985), 107(10), 2976-7
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 29 Jun 1985
 GI



AB T. *riisei* Collected in Hawaii contained 4 new eicosanoids, punaglandins 1-4, which bear Cl at C-10. Their structures, including relative stereochem., were determined by spectral and chemical methods. A Δ^7 constituent, punaglandin 3 (I), inhibited L 1210 leukemia cell proliferation with an half-maximum ID value of 0.02 $\mu\text{g/mL}$.
 IT 96055-65-1
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
 (of coral, antitumor activity and structure of)
 RN 96055-65-1 HCAPLUS
 CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



IT 96055-63-9 96055-64-0 96055-65-2

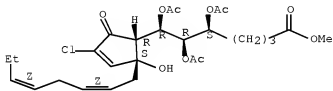
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)
(of coral, structure of)

RN 96055-63-9 HCAPLUS

CN Prosta-10,14,17-trien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

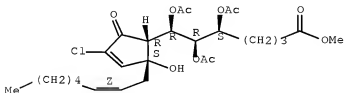


RN 96055-64-0 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

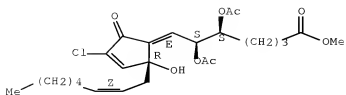


RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 96055-67-3F 96055-68-4P

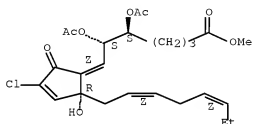
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 96055-67-3 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

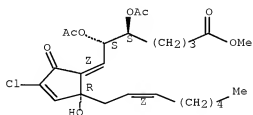


RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



Search History

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L1      1 SEA ABB=ON  PLU=ON  US2005-521570/APPS
        D SCAN
        SEL RN

FILE 'REGISTRY' ENTERED AT 10:09:43 ON 30 SEP 2008
L2      30 SEA ABB=ON  PLU=ON  (1029-96-5/BI OR 123941-77-5/BI OR
        133407-86-0/BI OR 13345-51-2/BI OR 140879-24-9/BI OR 142805-56-
        9/BI OR 143180-75-0/BI OR 155545-33-8/BI OR 155545-34-9/BI OR
        160791-07-1/BI OR 2353-33-5/BI OR 33069-62-4/BI OR 33419-42-0/B
        I OR 458-37-7/BI OR 538-58-9/BI OR 5956-04-7/BI OR 71503-81-6/B
        I OR 73211-11-7/BI OR 7689-03-4/BI OR 79655-73-5/BI OR
        83159-26-6/BI OR 83159-28-8/BI OR 86480-67-3/BI OR 87893-54-7/B
        I OR 89354-63-2/BI OR 9037-42-7/BI OR 96055-64-0/BI OR
        96055-65-1/BI OR 96055-66-2/BI OR 96055-68-4/BI)
L3      5 SEA ABB=ON  PLU=ON  L2 AND CL>=1 AND O>=6
        D SCAN
L4      STRUCTURE UPLOADED
        D
L5      0 SEA SSS SAM L4
L6      0 SEA SSS FUL L4
L7      STRUCTURE UPLOADED
        D
L8      0 SEA SSS SAM L7
L9      STRUCTURE UPLOADED
        D
L10     0 SEA SSS SAM L9
L11     STRUCTURE UPLOADED
        D
L12     0 SEA SSS SAM L11
L13     STRUCTURE UPLOADED
        D
L14     0 SEA SSS SAM L13
L15     0 SEA SSS FUL L11
L16     STRUCTURE UPLOADED
        D
L17     3 SEA SSS SAM L16
L18     STRUCTURE UPLOADED
        D
L19     12 SEA SSS SAM L18
        D SCAN
L20     0 SEA ABB=ON  PLU=ON  L19 AND L2
L21     242 SEA SSS FUL L18
L22     5 SEA ABB=ON  PLU=ON  L21 AND L2

FILE 'HCAPLUS' ENTERED AT 10:58:08 ON 30 SEP 2008
L23     127 SEA ABB=ON  PLU=ON  L21
L24     107 SEA ABB=ON  PLU=ON  L23 AND (PRY<=2002 OR AY<=2002 OR PY<=2002)
L25     107 SEA ABB=ON  PLU=ON  L23 AND (PRY<=2002 OR AY<=2002 OR PY<=2002)

FILE 'REGISTRY' ENTERED AT 11:45:32 ON 30 SEP 2008
L26     STRUCTURE UPLOADED
L27     8 SEA SUB=L21 SSS SAM L26
L28     173 SEA SUB=L21 SSS FUL L26
L29     5 SEA ABB=ON  PLU=ON  L28 AND L2

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Serial No.:10/521,570

FILE 'HCAPLUS' ENTERED AT 11:47:37 ON 30 SEP 2008

L30 75 SEA ABB=ON PLU=ON L28
 L31 0 SEA ABB=ON PLU=ON L20 AND (PRY<=2002 OR AY<=2002 OR PY<=2002)
 L32 63 SEA ABB=ON PLU=ON L30 AND (PRY<=2002 OR AY<=2002 OR PY<=2002)

FILE 'REGISTRY' ENTERED AT 11:49:37 ON 30 SEP 2008

L33 STRUCTURE UPLOADED
 L34 5 SEA SUB=L21 SSS SAM L33
 L35 141 SEA SUB=L21 SSS FUL L33

FILE 'HCAPLUS' ENTERED AT 11:52:15 ON 30 SEP 2008

L36 62 SEA ABB=ON PLU=ON L35
 L37 52 SEA ABB=ON PLU=ON L36 AND (PRY<=2002 OR AY<=2002 OR PY<=2002)
 L38 20 SEA ABB=ON PLU=ON MULLALLY J7/AU
 L39 1 SEA ABB=ON PLU=ON L38 AND L37

FILE 'REGISTRY' ENTERED AT 11:55:08 ON 30 SEP 2008

L40 STRUCTURE UPLOADED
 L41 0 SEA SUB=L21 SSS SAM L40
 L42 0 SEA SUB=L21 SSS FUL L40

FILE 'HCAPLUS' ENTERED AT 11:58:33 ON 30 SEP 2008

L43 51 SEA ABB=ON PLU=ON L37 NOT L39